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A corn project—Instruction in cultivation, Virginia

The new spirit of rural education

THE
CONSOLIDATED RURAL
SCHOOL

EDITED BY

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WASHINGTON, D. C.

ILLUSTRATED

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PREFACE

THE value of co-operation in place of individualism is rapidly rising in the consciousness of the American people. For many reasons we are far more closely related to more people of the world than formerly and are more conscious of the relationship. This expansion of personality is ready to-day to conceive and to realize feelingly the brotherhood of man and both national and world citizenship. The adjoining farms or nearest small villages do not circumscribe the breadth of our interests, acquaintance, nor economic exchange. To-day we think more in terms of the county, the State, the nation, and the world, instead of provincially limiting ourselves to the farm and the little one-room school district.

The automobile, telephone, good roads, trolley cars, newspapers, magazines, and larger administrative participation tend greatly to widen the area of our social connections. The stupendous world war with its unprecedented stimulus to close national organization of railroads, agriculture, and manufacturing, with all their implications of sacrificing individualism to social efficiency, has sent the world, and especially America, a long way toward a desirable organization of all of each nation's forces. The consolidated rural school is part and partner of this broader socialization and integration. It stands for educational efficiency in the interests of the nation and humanity by means of a greater degree of co-operation and organization over a wider area of territory.

Already thousands of such schools have displaced the little one-room structures of restricted neighborhoods and mental outlooks from sea to sea. Every State has done

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THE CONSOLIDATED RURAL SCHOOL

CHAPTER I

NATIONAL AND RURAL CONSOLIDATION

PRELIMINARY PROBLEMS

1. What have been some of the principal effects on democracy of the Great War?
2. What is a democracy and in what ways is it superior to autocracy?
3. What are some of the principal weaknesses of our democracy?
4. In what ways can public schools promote the best democracy?
5. What are the relative advantages and disadvantages of rural and urban life?
6. What are some of the principal problems and needs of country people as you know them? Classify these needs under the following headings:
 - (1) Health and physical-development needs.
 - (2) Economic and vocational needs.
 - (3) Recreational and avocational needs.
 - (4) Civic and co-operative needs.
 - (5) Moral and religious needs.
7. In what ways do the single-room schools help and fail to help significantly in the solution of the above rural-life problems?
8. What is your present conception of a consolidated school? On what is this conception based?
9. What is the best type of consolidated school of which you have knowledge?
10. To the solution and satisfaction of which of the above rural-life problems and needs might a first-class consolidated school be expected to contribute?

I. THE PRESENT RAPID INCREASE OF SOCIAL INTEGRATION

National Consolidation.—The World War has worked unprecedented transformations in the organization of American life. Individualism and competition were the great

economic and civic watchwords of the period before. Human brotherhood, universal democracy, world citizenship, a league of nations, and co-operation for social efficiency are the watchwords to-day. We have witnessed the interesting social anomaly of the Supreme Court of the United States prosecuting and fining corporations for co-operation and integration on a large scale and at the same time arranging with the individual members of the corporations for a greater and stronger co-operative organization and a more rigorous setting of prices than ever. The old Antitrust Sherman Law, on the one hand, and the organization of all the railroads of the country under a single government head, on the other, represent the rapid and inevitable change of view-point. The war has done for us in a few years what perhaps a century would not have accomplished in making us a united, organized, purposeful, and efficient nation.¹

A tremendous centralization of government has suddenly taken place, never to decentralize to our former status. Our young men have been taken from their homes, their factories, and their farms, and have been sent by the hundred thousand to Europe "to make the world safe for democracy"; the government has taken over many entire industries, nation-wide in scope, such as the railroads mentioned, and has integrated and ruled them as a unit and with a firm hand; prices have been set for all the principal commodities; and both production and consumption have been interfered with and regulated in the interest of national welfare to an extent formerly deemed utterly impossible except in a socialistic state. As the federal government has become entirely dominant and masterful in the nation, so, too, the individual State governments have drawn to themselves extensive powers formerly thought to be the posses-

¹ See address by the late President Charles R. Van Hise on "Some Economic Aspects of the World War," as published in *Science* for January 4 and 11, 1918, and his "Conservation and Regulation in the United States During the World War," published by the Food Administration, Washington, D. C.

sion of smaller governmental units or of individuals themselves. The nation and each unit of the nation, be it State, county, or township, has become to a large extent a mighty organized team of workers with a single purpose doing a great piece of work. Individuals joining such co-operative groups both lose and gain by the process. Usually they gain far more than they lose. In a democracy a fine balance between the individual and the state is maintained and its government ever comes from the consent and co-operation of the governed.

Becoming part of a great organization necessitates a knowledge of the whole co-operative enterprise and the part each plays in it; it necessitates trained habits of working co-operatively with broadened views and purposes; it requires of all that they use their initiative, originality, and energy for the promotion of the ideals and aspirations of the group. In such a world, with all the new and mighty engines and instruments of transportation and communication available, the social horizon of each person necessarily must be very much broader than in the days when the members of a family were practically all-sufficing, producing and consuming all they needed, and finding little stimulus to wide acquaintance and social give-and-take. Then the world was vast and unknown, as in the time of Columbus and later, to the provincial individualists on the little farm living unto themselves. To-day the world is rapidly becoming smaller and nearer to us all and it may safely be affirmed that a large county, with its good roads, telephones, newspapers, rural delivery, larger market, varied interchange of products and specialization of labor even in farming, and better schools with their wider view is, for all practical purposes, much smaller to-day than was a township forty years ago. In fact, for many thousands of people, a state with its many counties is better and more intimately known than was the township for the same number a few generations back. The journey of a family of children to a consolidated rural

school five miles away in a school-owned and controlled auto-bus or school-hack may be less of a journey with far less hardship and exposure and with possibility of far better attendance than the tramp through snow and mud, or even over good roads, to the single-room "district" school of the days gone by. As personality grows large and social the boundaries of the world recede until we become citizens of the little community of the world. Not to feel this closeness and kinship argues our own limited social development.

The City's Advantage.—The chief point of vigorous growth and development in the United States has, however, been not in the country but in the cities. It is in the cities in the last fifty years that we have seen most of the decided inventions and improvements in living. The best brains and brawn of the country have flown thither several hundred thousand strong each year. Arriving there these persons, naturally individualistic by farm-training and isolation, have at first worked for themselves or at most for the city at the expense of the country. Here practically all the noteworthy developments in government, in sanitation, in association, in recreation, in business, and in education have taken place. The city has steadily beaten the country in competition. The schools of the city have been the marvel of the rural regions, and one of the chief reasons of many people for "leaving the farm" has been to obtain the advantages of the superior city schools. As a consequence of so many absentee landlords of farms, we have the grave evil of wide-spread and rapidly increasing farm tenantry, the "renters." Strange as it may seem, city life has been made more attractive for millions than country life. Even in health, the great city of New York has surpassed the rest of the State with a lower death-rate. The city has procured this attractiveness by being open-minded, social, progressive, co-operative, alert and inventive. The country has stood still or moved more slowly because of the opposite of such qualities.

In the legislature, in the business deal, in enterprise, and in the schools the city has achieved a marked advantage over the country. The school buildings have been far more sanitary and attractive; the courses of study have been more closely related to the needs of life and more meaningful to the pupils; the principal additions to the ordinary schooling have nearly all been made in the city; the teachers have been much better trained, better paid, and have stayed in the profession in many more instances until they have learned to do well this most important work of modern democratic governments; the school years have been longer; attendance of pupils has been more punctual and regular; medical supervision, physical education, vocational and domestic education, art and musical education, have been made regular parts of the school activities. The teachers have not only been superior and more permanent but they have had excellent supervision and training, both before they have entered the schools and while in service—through principals, supervisors, and superintendents. The leaders of country children and youth, on the contrary, have been, for the most part, young untrained girls who have never seen superior teaching done, have never learned how to do it, and who do not have the age and breadth of view, nor remain in the work long enough to get to be much more than "blind leaders of the blind." "The rural school has been a little house, on a little ground, with a little equipment, where a little teacher at a little salary, for a little while, teaches little children little things." Such teachers, who, according to Commissioner Claxton's figures in the next chapter, are the typical teachers of the nation's rural schools, cannot give pupils a wider view of life and the world to-day than they themselves possess. If their horizon does not extend beyond the adjoining farms the horizons of the children will not except by chance extend farther. Such teachers necessarily create ineffective provincials where they need to create socially efficient citizens of the world.

II. THE RURAL-EDUCATION PROBLEM AND THE CONSOLIDATION HYPOTHESIS

The Rural-Education Problem.—Some of the best minds of our nation and others have wrestled with the problem of how to improve rural education. The problem seems to break up principally into the following analysis:

1. How can we get better and more permanent teachers?
2. How can we get better and more needed subject-matter?
3. How can we get better and more supervision and administration?
4. How can we get better and more buildings and equipment?

These usually resolve themselves into the problem: How can we get more money for rural schools? and its corollary, How can we get this money wisely spent?

The consolidated school is one hypothesis, or tentative solution, for this great problem of how to secure more effective rural education and thus a higher type of country life. The principal suggested solutions are, among others, the ten following:

1. Strengthen the state departments of public education.
2. Provide compulsory laws for minimum salaries, terms, attendance, etc.
3. Provide new sources of revenue for schools.
4. Provide a better distribution of the money now spent.
5. Strengthen the county departments of education in various ways, and provide for the county unit where absent.
6. Provide for extensive supervision of teachers in rural schools.
7. Provide consolidated schools in place of the many single-room schools.
8. Provide school-farms and a better living for the principal teacher.
9. Provide transportation of pupils to large schools.
10. Provide for high-school, normal-school, and other professional training for rural teachers.

Many different solutions in actual practice as schools are to be found scattered over the United States.¹

Now all of these are good. Probably all are necessary. We can get fairly good schools without consolidation and its concomitants. County Superintendent Cook of Baltimore County, Maryland, has undoubtedly obtained fairly good schools without consolidation, through extensive and professional supervision and a number of the other nine factors. Consolidation is hard to secure in many places and in some spots it is probably undesirable. We should like to take the space and time to analyze the advantages and disadvantages of each of the ten typical solutions mentioned above and compare them with the aim of selecting the single solution or group of solutions which has most of advantage and least of disadvantages. Before proceeding further some definition may be desirable.

A consolidated rural school may be defined tentatively as a school produced by bringing together the pupils of two or more single-room or other schools in a graded school of at least two rooms and two teachers for the purpose of better educational advantages. It is of various types and increases in excellence as it adds various features. Such additions may be listed as follows:

1. Classrooms—from two to many.
2. With but the upper grades to an entire elementary school and high school.
3. From no assembly-room and study-hall to excellent ones.
4. From no rooms for agriculture and household arts to excellent ones.
5. From no laboratories for the sciences to one or more for each.
6. From no lunch-room to an excellent one.
7. From no gymnasium, shower-baths, and outdoor-play apparatus to full equipment.
8. From outdoor privies to best modern indoor flush toilets.

¹ See Monahan's bulletin of the U. S. Bureau of Education on Consolidation and Foght's "The Rural Teacher and His Work" (Macmillan).

9. From no office for principal or teachers' retiring-rooms up to the best for both sexes and an excellent office with waiting-room.
10. From small grounds of less than an acre up to a site with fifty or more.
11. From no transportation of pupils up to the best, in exhaust-heated, glass-lighted auto-vans.
12. From no teachers' and principal's cottages, or teacherages, up to the best.
13. From no experimental and demonstration use of land up to best.
14. From no good ruralized course of study up to the best.
15. From poor, inexperienced, inadequately trained teachers up to best normal and college graduates.

The list might easily be extended as a class exercise.

The first-class consolidated school, serving an area requiring pupils to be en route either way no longer than an hour as a maximum when transported at public expense, seems to combine more advantages and fewer disadvantages than any other solution, covers more of the other solutions, and does so with greater economy for the results obtained than any other. For brevity, we list below some of its chief advantages and disadvantages which might easily be extended, expanded, and discussed at length.

III. SUPERIOR CONSOLIDATION AND ITS ADVANTAGES

Some Advantages of First-Class Consolidation.—1. It greatly *widens the acquaintance group*, uniting several small or partial communities into one, and so broadens the individuals socially, and meets the imperative demand for a broadening of economic and social co-operation. Pupils who go to school together from an area ten miles or more in diameter for five to twelve years, through elementary and high school in many cases, will possess in adult life a neighborhood much larger and richer in its relationships than the narrow one produced by the one-room school. Where this consolidated area is a natural, economic, racial, transporta-

tional, and distributional unit, as it should be, we have an area as large as a Western township or larger developed into a neighborhood.

2. It provides inevitably for better educational, economic, and social *leadership*. The larger school with from one to several hundred pupils must be placed under strong management and wise leadership. It necessitates from the nature of the case a man or woman as principal teacher and supervisor, with a strong personality and good educational training. As soon as the strategic importance of this post is recognized, there will be the inevitable demand that the principal give his entire time, winter and summer, to the school and the community, and be an educational, agricultural, and social leader. This immediately involves a home for the principal on the school property and a school-farm. The free use of the teacherage and the farm will add something to what should be a good money salary, not less than a hundred dollars a month, twelve months in the year, and thus make it possible to obtain and retain a man with a family who has been trained in education, agriculture, rural economics and sociology, and in the elements of rural leadership, a man with at least a bachelor's degree from a good agricultural college. Since the farm and teacherage can be purchased at once or through bonds at the time the school building is erected, a fair share of the principal's pay has been provided for at the beginning without the usual annual financial agony. Under the one-room system there seems to be no way by which a sufficient salary for each teacher can be secured when paid as annual or monthly wages. House-rent and the free use of the farm and its products may soon be taken as a matter of course, to which a good salary is to be added.

3. More *professional teachers* subordinate to the principal will be procured and developed. Such a principal will not be satisfied with young-girl novices, a new one each year, without education, experience, training, or vision, to prac-

tise on the children. He will have an opportunity to convince the school board of the economy of superior teachers at any salary necessary to obtain them. His graded school with its better division of labor and opportunity for specialization by the department plan, each teacher teaching a few instead of many subjects, the contingent opportunity, growing out of the nature of the situation, of living at a good boarding-place in a house also erected on the school property for the use of the unmarried women teachers, and perhaps another for the single men teachers, the better social opportunities for recreation and association, and the fine opportunity to observe some good teaching and to get frequent and professional supervision and help in becoming a better teacher—these advantages add greatly to the value of the position for a teacher; and for seven to twelve hundred dollars a year real country-minded teachers can frequently be secured as able as those in cities obtaining larger annual salaries, although the consolidated school must usually equal at least the city salary and the attractions there.

The one-room school has been entirely unable to procure such teachers. Every consolidated-school teacher can be a normal-school graduate and equipped perhaps with a year or more of experience in a one-room school and in many cases with some college work. Weekly teachers' meetings, reading circles, a good school library, the presence of high-school teachers in the same building, the constant study of community and general social needs, and the interest and freedom obtained by a new type of school for adjusting the school to both the nature of children and society, will all prove stimuli to growth not available in a smaller school with an isolated teacher and children of all ages in all grades. That first-class consolidated schools (not "cheap imitations of the real thing") can secure such teachers the statistics from many States, as indicated in succeeding chapters, show. Break the ice of tradition with such a school and people somehow release the grip on their purses and are

more ready to purchase a genuine rural education for their children.

4. As suggested, *high-school provisions* may usually come at the beginning or develop with such a school. The larger area, the better attendance, the increased number of pupils passing through the grades, the better opportunity to give publicity to the desirability of secondary education, and the greater interest and stimulus coming from numbers, lead inevitably under good leadership to a vigorous high school closely adapted to community welfare. That consolidation actually secures high schools and a vastly increased high-school attendance over the one-room-school plan has been amply demonstrated by reliable statistics. We believe that such a school is preferable to a county high school with dormitories for girls and boys as are found in Mississippi, North Carolina, and elsewhere. Daily rides in a school-bus are probably preferable to being away from home at this age. If we are to realize the slogan of the United States Bureau of Education and rise to the educational standard which the modern age is making imperative, *a high-school education for every boy and girl*, no other plan seems to bring it more quickly and permanently in the country and village than the consolidated school with free transportation in school-owned vehicles.

5. Where such schools are established in large numbers in a State, as in several States already, the inevitable tendency will be for these high schools to *increase the attendance and service of agricultural colleges and normal schools*, both of which have a great dearth of students in comparison with State and national needs. The demand of the times for trained rural teachers and agriculturists and for real leaders in these two supremely important lines is at present either not met at all or but meagrely satisfied. Such schools more and more guide pupils back to rural service. The consolidated school, in our judgment, is the hope of these important and fundamental higher schools and thus the hope

of the country. What they should do in encouraging the entrance of high-school graduates to their schools and courses we suggest in a later chapter.

6. *A better programme of studies* can be provided, based on social needs and the nature of mental and physical growth in children. The range and quality of educational activities in a one-room school are necessarily limited. Nearly every factor in the situation hinders enrichment and modernness here. Nothing is more fraught with promise for rural life than the many original experiments now being carried on in these consolidated schools from California to Maine and from Washington to Florida. Even the Philippines and Alaska have important contributions to suggest. Psychologically, a new country or a new type of social institution, such as the consolidated school, clears the ground of retarding tradition and opens the way for progressive experiment and adjustment. Another chapter by the editor enters more fully into the problem of the programme of studies and rural-school curriculums. A city school in the country is very far from our standard for this new country school. The needs of life as determined by intelligent surveys of actual life furnish the starting-point for real education, and rural needs are in many ways very different from city needs.

7. A much-needed and better *social centre* for the larger community is provided, or *can* be provided and made possible, through the consolidated school. An auditorium and gymnasium, or the two combined, are becoming standard features of such schools as of the best city schools. The playground is larger and has more drawing power on the community and pupils. The school-farm, however small, is a source of interest, comment, instruction, and community-meeting-together for agricultural conference. A motion-picture show in the auditorium is one of the chief recreations of the people of many consolidated-school neighborhoods. A glimpse of one in Ohio is given in a later chapter. The



Country boys at practical work



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Building a silo. A project in farm mechanics in Minnesota

daily assembly in an auditorium can be made more valuable to many pupils than their knowledge of any subject, and may legitimately be considered an important subject of the curriculum. Indeed, auditorium activities succeed best where the principal, faculty, and students give as much time to preparation of this as to any one of the regular subjects. School fairs, athletic meets, debating and public-speaking societies, "literaries," agricultural and other exhibits, public voting, non-sectarian religious meetings, and many other social-centre activities naturally take place here in the single public building possessed by all the people. The post-office is being located in a number of schools and parcel-post buying and selling, eliminating large middle-men profits, is being experimentally developed. This feature is also expanded in later chapters.

Many other advantages might profitably be discussed. The enlarged social mind of the modern countryman who gets about in his automobile over a wider range of territory than his fathers and who is in connection by other means with a great variety of persons and social activities easily adapts itself to the consolidated school. Some difficulty may be met in establishing such a school, but once established it quickly becomes a part of the community life, even as the motion-picture machine, the automobile, or any other clearly desirable creation of the modern age, as the following letter suggests:

WORCESTER, N. Y., Sept. 15, 1915.

DOCTOR THOMAS E. FINEGAN,

Asst. Commissioner, Education Department, Albany, N. Y.

Dear Sir:—I am owner of a farm in union free-school district number 3, Otsego County, N. Y. In 1915 six school districts consolidated.

I was strongly opposed to the consolidation and to the new school and I harbored resentment toward our district superintendent for establishing it.

After one year's trial and observation I have changed my mind. We are delighted with the new régime. Our twelve-year-old girl

passed Regents' examination in English, geography, arithmetic, and United States history during the year. She is now entering the high-school department.

For six teachers in poorly equipped buildings we have received five normal-school and college graduates in one modern plant. The work is now graded and scientifically conducted, while an automobile school-bus calls at our door daily to transport the children. No one with a family to educate would willingly go back to the old conditions.

Very truly yours,

L. J. COE.

A number of other similar letters from representative patrons, pupils, and others in the State of New York may be found in the annual report for 1917 entitled "Elementary Education" of the Education Department of the University of the State of New York. The volume, by the way, is a mine of information on and illustrations of consolidation in that great State which until recently has been doing comparatively little in this line. These letters could be matched by correspondence from patrons in most parts of the country. That by the time this chapter is read some ten thousand or more such schools (with consequent abandonment of from fifty to a hundred thousand little schools) will have been established is our best argument. After giving a summary of advantages of consolidation, as expressed by the present State Superintendent of North Dakota who has had much experience in this field, we shall leave discussion of further advantages to later chapters.

A detailed statement of the benefits of consolidation:

1. Increases the attendance.
2. Makes the attendance more regular.
3. Increases the enrolment.
4. Keeps the older pupils in school longer.
5. Provides high school privileges at one-third the cost.
6. Makes possible the securing of better-trained teachers.
7. Results in higher salaries for better-trained teachers.
8. Makes possible more and better grade work.
9. Improves industrial conditions in the country.
10. Enriches the civic-social life activities.

11. Conserves more largely the health and morals of the children.
12. Increases the number of eighth-grade completions.
13. Provides adequate supervision.
14. Reduces truancy and tardiness.
15. Develops better school spirit.
16. Gives more time for recitations.
17. Increases the value of real estate.
18. Produces greater pride and interest in country life.
19. Prevents the drift to the larger towns and cities.
20. Brings more and better-equipped buildings.
21. Eliminates the small weak school.
22. Creates a school of greater worth, dignity, and usefulness.
23. Makes possible a more economical school.
24. Provides equal educational opportunities.
25. Gives much greater and better results in every way.

IV. THE DISADVANTAGES OF THE CONSOLIDATION HYPOTHESIS

The disadvantages, difficulties, and problems of the consolidated rural school are taken up in a later chapter and met by convincing argument. We need not summarize them here. The chapter may be read immediately if desired. The hardest problem is to get a real consolidated school, with complete or fairly complete plant, transportation, and staff, established. After that it is its own best argument. State aid, county administration, strong county superintendents, and able publicity are desirable. The teacher is, however, the single most important factor in education and no consolidated or other school can be a success with poor teachers. These teachers must have supervision, training while in service, reasonable inducements to stay at the school for a number of years, and satisfactory equipment. The pupils should be gathered from a large enough taxing and transportational area to make possible a good rural graded school with high-school provisions. They should be transported at public expense in first-class conveyances under the best supervision obtainable. Supervision of the recreation of the pupils in the auto or other bus is not second

in importance to such supervision at school or home. The principal must be an educational and agricultural leader, teacher, supervisor, and trainer of teachers.

Frequently where a consolidated school is found disappointing or little better than the one-room system but few such essentials are provided. The plant may be *called* a consolidated school when it is little more than a two to six room building for a large number of children who have to walk long distances and be instructed by poor teachers without supervision, using a course of study made for a city-school system. This is like the disappointment arising from the purchase of an automobile without a top, side-curtains, tires, tool-box, electric starter, instruction-book, bumper, brakes, mud-guards, and so on. The thing is entitled to the name automobile, but automobiles in general should not be judged by the performance of a poor, ignorant driver with such a machine. A complete, first-class car and a skilled chauffeur give durable satisfactions of a high order. Later chapters give detailed descriptions of the kind of consolidated school that is worthy of the name and will furnish a real rural-life education near the home farms.

V. SUMMARIZING PRINCIPLES

In Conclusion.—National consolidation of interests and efforts are taking place on a gigantic scale and with great rapidity due to the World War and stimulated enterprise. The vast industrial activities of the country are being organized into combinations that tend to eliminate waste and competitive inefficiency, but now under the leadership and regulation of a democratic government instead of its active opposition and hindering laws. If government regulation fails or is less effective, everything considered, then government ownership, then nationalization or socialization, of these enterprises will be undertaken as the government has already taken over the postal service, much of the express

business in the parcel-post, the schools, water-supplies, and many other natural monopolies. The prices and distribution of wheat, corn, cattle, and many other farm products will hereafter be handled more on a national scale and under government direction. We enter to-day a period of rapid economic and social nationalization. Any rural region that remains individualistic, reactionary, with an education no better than that of the pioneer type of single-room school, is bound to fall behind in all five types of social efficiency, vital, vocational, avocational, civic, and moral.

This national concentration and management will probably not tend to increase the size of farms, as Professor Vogt indicates in his "Rural Sociology," although it will greatly increase the need of broader national knowledge and co-operation among farmers. The farm will and should probably remain at that size which can best be handled economically by the average rural family with the best of modern machinery and agricultural science. Tenant farming will be decreased and ownership will again become characteristic. More ideal living will be achieved in the rural community, and a chief factor in this rise to a new standard in response to pressing needs will be a new type of public, democratic school appropriate to broader rural organization and higher efficiency. We have made the start toward such an institution by the present consolidated school. That it is a cure-all for every rural and national ill we do not believe. That it is a safe and progressive line of advance we have no doubt. May its tribe increase!

National Rural-Educational Principles.—As a fitting close to this chapter and introduction to Commissioner Claxton's masterly survey in the next, we append the following resolutions which were unanimously adopted at a recent national conference on rural education and leadership.

"We appeal to all interests for hearty co-operation in a nation-wide campaign for the improvement of our rural

schools, and to this end we indorse the following items agreed on and adopted at the Nashville Conference in the fall of 1915:

1. An academic term of not less than 160 days in every rural-school community.
2. A sufficient number of teachers adequately prepared for their work.
3. Consolidation of rural schools where practicable.
4. A teachers' home and a demonstration farm of five or more acres as a part of the school property.
5. An all-year school adapted to local conditions.
6. A county library with branch libraries at the centres of population, the public schools to be used as distributing centres.
7. Community organization, with the school as the intellectual, industrial, educational, and social centre.
8. High-school education for all country boys and girls without severing home ties in obtaining that education.
9. Such readjustment and reformation of the courses of study in elementary and secondary rural schools as will adapt them to the needs of rural life.

We respectfully submit the following additional items for the improvement of the rural-school situation:

10. We express our approval of a larger unit in school administration to the end that the democratic ideal of equal opportunities for all children may prevail. Americanism should mean adequacy, but this quality can be demonstrated in American citizenship only when the greatest good to the greatest number shall become the cardinal principle of American education.

11. We believe that the great need of rural elementary teachers is a broad mastery of a fairly limited group of subjects, each rich in social values. To this end the course of study for rural teachers in the normal schools should relate specifically to the problems of the rural teachers. Accordingly, the course of study should give large place to history, English language and literature, the rural sciences, including economics, marketing, rural organizations and administration, and recreation and play. There should be eliminated the foreign languages, the higher branches of mathematics, and such other subjects as do not contribute rather definitely to the full performance of the rural teachers' task.

12. We believe that the great American need is an intelligent and productive home-loving, home-owning rural population. We urge, therefore, the great demand upon the rural schools, elementary and

high, for the effective teaching of agriculture and other rural activities. We believe that a home-project plan by which each child conducts some agricultural home project under the direction and guidance of the school, coupled with the demonstration and experimental farm on the school grounds offers a satisfactory and effective means.

13. We recommend the establishment of rural normal-training teachers' courses in normal schools, teachers' colleges, universities, and agricultural colleges for the purpose of preparing normal-training instructors, that these instructors may train their students for a better understanding of rural conditions and how to meet them, and ultimately prepare them for better teaching and more effective service.

14. We recommend the establishment of county travelling libraries for use of rural schools, with the county superintendents' office as the distributing centre.

15. Since the public school is the foundation of our democracy and since the ultimate purpose of that democracy is to perpetuate itself, we believe the surest road to this end is for the people to exemplify in the community itself the lessons of free institutions in the management of their public schools. We realize that our rural schools have not kept pace with other lines of progress and that new levels must be reached. In order to realize this it becomes necessary for us to employ the best talent to co-operate with us, for which we must return a just remuneration. If we as a people are to maintain our strength we must retain our responsibility. Good teaching seeks to encourage the child to develop and rely upon his own resources, so good government seeks to inspire a people to unfold their own powers through the proper exercise of the same."

PROBLEMS IN APPLICATION

1. If possible, visit at least one single-room school and a consolidated school and compare their advantages and disadvantages.
2. Which would cost a community more: providing first-class, single-room rural-school plants and teachers or a first-class consolidated-school system?
3. Which of the ten suggested solutions of the rural-education problem have been put into successful operation in your present county?
4. What are the relative advantages and disadvantages of a county high school or schools with pupils living in dormitories and of a number of consolidated elementary and high schools combined with free public transportation? (See Doctor Foght's book on

“The Rural Teacher and His Work” for descriptions of some of the Southern boarding-schools.)

5. Make a list of rural problems as suggested by Doctor Vogt’s volume on “Rural Sociology.”
6. Has the city had any such advantage over the country as suggested in this chapter? Give your reasons.
7. What advantages of first-class consolidation have been omitted from discussion in the chapter?
8. Before reading further make a list of the arguments country parents and others would make against consolidation.
9. Is free transportation in publicly owned vehicles essential to the definition of a consolidated school?
10. In what ways could a first-class consolidated school promote larger social movements?
11. How many consolidated schools are there in the United States? At this writing (1919) there are nearly eleven thousand, defining the school very liberally as one formed by the union of two or more schools for better educational advantages, and at least two teachers doing graded work. It *should* include public transportation, a model building, and superior teachers and curriculum.

BIBLIOGRAPHY

1. Vogt—“Rural Sociology.” Appleton.
2. Carver—“Rural Economics.” Macmillan.
3. *Year-Books* of the United States Department of Agriculture, Washington, D. C.
4. Butterfield—Chapters in “Rural Progress.” University of Chicago Press.
5. Suggestions for Parcels-Post Marketing, United States Department of Agriculture, Farmer’s Bulletin, No. 703.
6. Rural-Life Surveys by: The Roosevelt Commission; The Presbyterian Board of Home Missions; United States Bureau of Education, in its Educational Surveys; various other State and private organizations.
7. Foght—“The Rural Teacher and His Work,” Bibliography, pp. 345-354. Macmillan.
8. Rapeer—“Educational Hygiene,” sections on health sociology and chapters on rural health. Scribner.
9. ————“Teaching Elementary School Subjects,” chap. I. Scribner.
10. Foght, “Rural Education,” Bulletin, 1919, No. 7, U. S. Bureau of Education. Contains list of surveys of rural education and present country-life commissions.

CHAPTER II

THE AMERICAN RURAL SCHOOL

PRELIMINARY PROBLEMS

1. To what extent have cities profited by the expenditures of the country for the schooling of country boys and girls? (See chap. VII, on Movements of Population, in Vogt's "Rural Sociology.")
2. To what extent are cities and entire states and the nation interested in and responsible for the proper schooling of all country children?
3. If people remained all their lives in the communities where they obtained their schooling, and each community thus obtained the product of its expenditures, great or little, to what extent would this lessen the need for county, State, and national support?
4. What did the draft of the young men of the land show the health conditions to be? What per cent were rejected for physical defects? What per cent were illiterate? See "Second Report of the Provost Marshal General," Government Printing Office, Washington, D. C.
5. How many single-room schools of your home State have less than fifteen pupils?
6. What per cent of the rural teachers in your home State have a high-school education? What per cent have had at least two years of normal-school training? What per cent are college graduates?
7. How does the professional and general training of the rural teacher compare with that of the rural physician? Is the work of the one less skilled, scientific, professional, or less important than the other?
8. What per cent of the rural pupils of your home State graduate from the eighth grade? From high school?
9. What is the unit of school administration in your home State, district, township or town, or county control?
10. What are the principal educational reforms needed in your home State for the betterment of rural education?

NOTE.—The reports of your State superintendent or commissioner of public schools, the reports of county superintendents, the proceed-

ings of State teachers' associations, and the reports of any educational and social surveys made by the United States Bureau of Education or other organization will be of help in this preliminary orientation. The annual reports of the United States Commissioner of Education give summaries of rural-school progress and conditions. Some of the above problems may be left for the problems in application after reading the chapter if desired, although this is not recommended.

I. THE RURAL-SCHOOL PROBLEM

In our industrial, social, civic, and religious democracy everything waits on education. No real progress and no lasting improvement in any line of life is possible except through the better education of the people. The deepest meaning of democracy is equality of opportunity. This is impossible without equality of opportunity for that education which prepares for life, for citizenship, and for productive occupations. Therefore the right education of all the people becomes our chief concern, and to provide better and more adequate means thereto must be the most important task of society and State. Among the agencies of education, the public school may, I believe, fairly be considered the most important.

Since almost three-fifths of the children of school age live in the open country and in small towns under rural conditions, and since more than three-fifths of the enrolment in the public schools of the nation is in the public schools of rural communities, the rural public school represents the larger half of the public-school problem. Since the drifting of population from country to city is approximately 400,000 a year and that from city to country is almost negligible, the city is interested in the schools of the country in a manner and to a degree which do not obtain in the reverse direction. Since only two-thirds of the people of the country as a whole are living in the States in which they were born, and nearly one-fifth were born in other States of the Union than those in which they now live, and since these

movements from State to State are largely of the rural population, the improvement of the rural schools of any State becomes a matter of interest to all other States and to the nation at large. Of course this is also important for other and still more important reasons. The many studies of various phases of the rural school made in recent years and the voluminous discussions in books, magazines, and the daily press, and on the platform indicate an increasing general consciousness of these facts. It is therefore no new nor small problem of which I am to present here a brief outline, and for the solution of which I am to try to offer some suggestions.

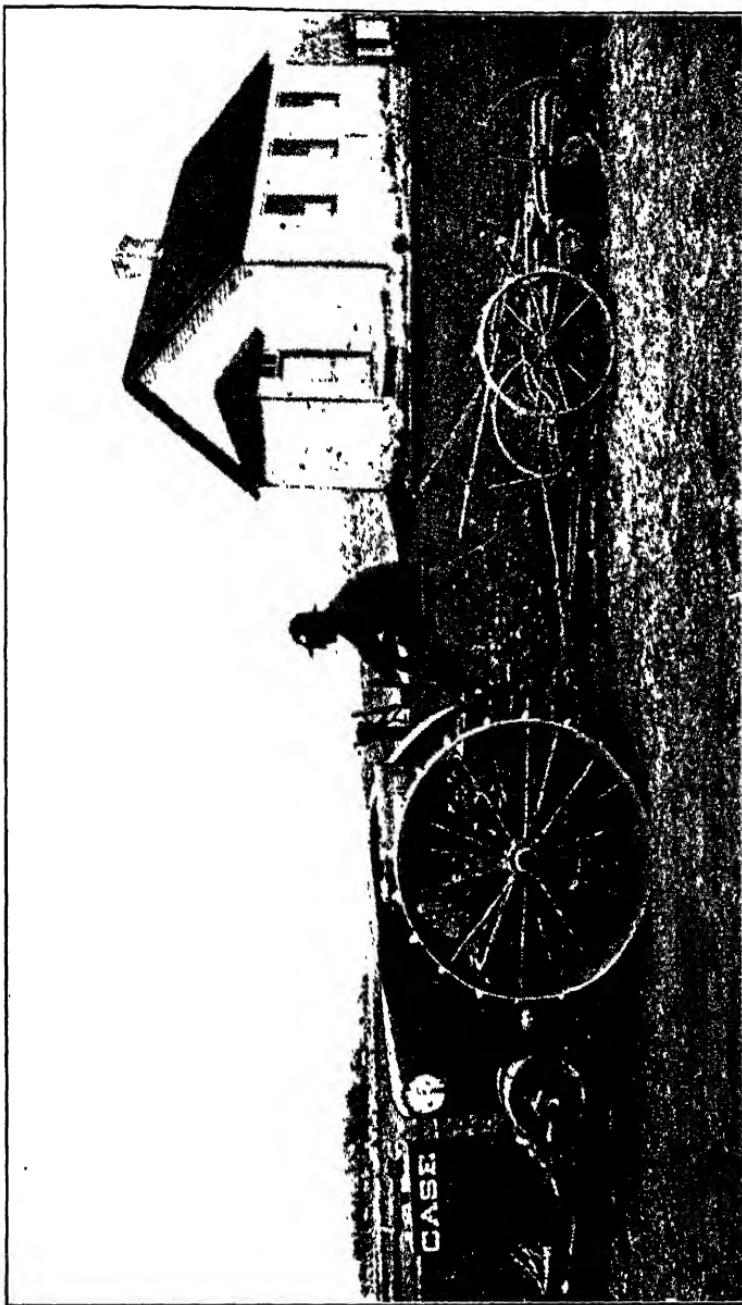
Approximately 16,000,000 children of school age (6 to 20) live in the rural communities of the United States; about 11,000,000 of these are enrolled in the public schools. Something like 60 per cent of those enrolled are in the 212,000 one-teacher schools; the remaining 40 per cent are in consolidated and village schools having two or more teachers. The average enrolment in the one-teacher schools is approximately 31, which is less by 6 or 8 than the average enrolment in other schools of country and city. In more than one-fourth of these one-teacher schools the total enrolment is under 15, and in a large part of these it is less than 10. In many such schools, therefore, the enrolment must be considerably more than the average of 31. In many schools the actual attendance on any day is so small as to make the per-pupil cost of the schools very large and to make it difficult for both teachers and children to maintain the interest necessary for any profitable work. The State superintendent of Iowa reported for the month of January, 1910, 250 schools in that State with an enrolment of five or less, and 1,814 with an enrolment of from 6 to 11. On the best day in the third week of that month 10 schools reported an actual attendance of one pupil only; 35, two each; 73, three each; 160, four each; 244, five each; thus 522 schools reported an actual attendance of five or

less. The average daily attendance out of every 100 pupils enrolled was in 1910, for the city schools, 79.3, and for the rural schools only 67.6. The average daily attendance based on enrolment fell as low as 54.4 per cent in Mississippi, 51.4 per cent in Delaware, and 51 per cent in Maryland.

Even in the great State of New York in 1915, as shown in a letter on the imperative need of a larger unit of rural-school administration and school consolidation written to the legislature of the State by Commissioner Finley, there were 11,642 elementary schools. Of these, 8,430 were one-room schools. In almost *half* of these (3,580) the average attendance for 1913 was ten or less, as follows:

Schools	Average Attendance	Schools	Average Attendance
13.....	1	440.....	6
74.....	2	533.....	7
172.....	3	544.....	8
235.....	4	631.....	9
362.....	5	576.....	10

The Terms.—The average length of rural-school terms in 1910 was but 137.7 days; for city schools it was 184.3 days, a difference of 46.6 days in favor of the city schools. The average length of term of the rural school varied in the several States, from 90.1 days in New Mexico, 93.3 days in North Carolina, 94.5 days in South Carolina, 98 days in Arkansas, to 178 days in California, 178.6 days in New York, 181.2 days in Connecticut, and 190.2 days in Rhode Island. The difference between the average length of rural-school term and that of city-school term varied in the several States from 3.8 days in Rhode Island and Connecticut, 8 days in California, and 9.8 days in New York, to 68.5 days in North Carolina, 69.8 days in Alabama, 71.2 days in Kentucky, and 88.5 days in South Carolina. But averages do not tell the whole story of the lack of equality in opportu-



A nineteenth-century school and twentieth-century farming implements side by side

From "Rural School Improvement in Colorado," by C. J. Sargent

nity for education in the rural communities. Recently the Bureau of Education asked all the county and township superintendents of the several States for facts about individual schools. This inquiry revealed the fact that not a few rural schools are in session less than three school months of 20 days each, and a few only a little more than one month. In Jeff Davis County, Georgia, the average length of all white schools was reported as 60 days; in Liberty County, Georgia, white schools were reported of 40, 50, 60, and 80 days, colored schools of 30, 40, and 50 days; in Walton County, Florida, white schools of 30 and 60 days, the average for the county being 80 days; in Putnam County, Tennessee, white schools of 27 and 40 days were reported, the average for all schools being 90 days; in Lincoln County, Nebraska, schools were reported of 59, 79, 86, 98, 99, and up to 160 days; in Shannon County, Missouri, the terms ranged from 60 to 160 days. These examples taken at random serve to indicate the wide variety of conditions in many States. The average daily attendance of children enrolled in rural schools of the entire country is approximately 95 days. For a few States it is less than 60 days and for many counties less than 40 days.

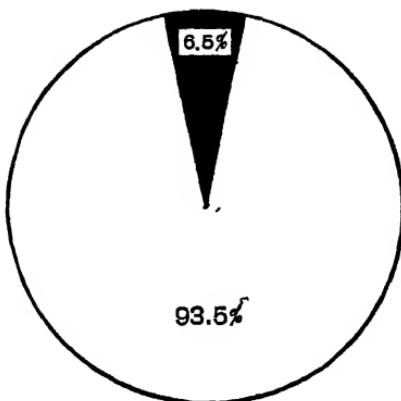
The School Plants.—Within the last ten years there has been a very encouraging improvement in rural schoolhouses and their equipment, but many schools are still taught in houses wholly unfit for the homes of children during the years when environment means so much for health of body and character of soul. One room, poorly built, ugly, badly lighted, heated, and ventilated, dirty, with uncared-for grounds, no adequate supply of pure water, and with filthy outhouses or none—these specifications indicate the type of rural schoolhouse still all too common in most parts of the country.

The Administration.—Within the last few years there has also been a commendable increase of interest in the improvement of rural-school organization, control, and super-

vision, and some improvement has been made in most States. However, the single-school district is still the most common unit of organization and control. It is the only basis of organization and control for the rural elementary schools of seventeen States and partly so for four other States. It is the largest factor in organization and control in seven other States which have a semi-county system in which the balance of power rests with the districts rather than with the counties. There may be as many as 30,000 or 40,000 school directors in some of these States. Some years ago one State superintendent reported that there were in his State 25,000 district school directors, of whom 5,000, he said, could not write their names. Historically necessary, the usefulness of this plan of school organization is now passed and the tendency is away from the single-school district to the large unit of town, township, magisterial district, or county.

The tendency toward the county is becoming stronger. Nineteen States are organized on the county basis and several others have a semi-county organization, dividing control between county and some smaller unit—union district, township, or single-school district. Several other States have county boards of education with limited functions; thirty-nine States have county supervision, three have county and supervisory district supervision. All others have some kind of township or district supervision, but in most States the supervision is not efficient and under present conditions cannot be. A county superintendent, having meagre education and no professional knowledge, elected or appointed for partisan political reasons, paid a salary so small that he must devote most of his time to some other means of making a living, and dividing the remainder of his time between the routine business of his office and the supervision of a hundred or more schools scattered over a territory of three to five hundred square miles, this territory being traversed by bad roads during a good part of the

One Reason Why Positions in the Country Schools of
Fisher County are Not Desirable



93.5 Per cent
of the teachers changed
positions in 1913-14.

6.5 Per cent
of the teachers did not
change positions in 1913-14.

IN A TOTAL OF SIXTY-TWO TEACHERS:

58 changed positions at beginning of last session.

4 taught two years at same place.

None taught three years at same place.

43 were new teachers in the county.

Contrast this with the schools abroad where teachers seldom change more than once in a lifetime.

Does any other public or private business permit such a waste by the constant changing of employees?

If positions are to be made more attractive to the best teachers and if the school is to attain its highest efficiency, there must be a

LONGER TENURE OF OFFICE FOR THE TEACHERS

—From “A Study of Rural Schools in Texas,”
Bulletin of University of Texas.

minutes each. But much less than the full time can be so used, probably not more than three hours—180 minutes.

There are many interruptions. Coming and going of classes consumes much time, as do also cases of discipline. Muerman counted 273 questions, more or less useless, asked by pupils of the teacher in one school in the course of one day. The lesson periods average six or seven minutes, three or four minutes for classes in lower grades and 10 or 12 in some of the more important classes of the higher grades. It may easily be seen that the actual time any child gives to school work cannot be long. Studies made in schools in different parts of the country indicate an average time of 1½ to 2 hours for children in the first two or three grades, 2 or 3 hours at most for children in the intermediate grades, and not more than 3½ or 4 hours for those of the higher grades. I have found schools in which the smaller children gave attention to any school work either at study or at recitation less than 30 minutes a day. If all children of most rural schools did intensive work for 2½ hours in the morning and then went home, much more might be accomplished than is now accomplished.

Until a half-dozen years ago there were very few high schools in the rural communities of most States and more than half of the boys and girls of rural America are still without free access to any good high school with full courses of four years. One-fourth or more of all boys and girls of this generation get some high-school education, but the proportion is much smaller in the communities in the open country than in villages, towns, and cities. Frequently the country high school has only one or two teachers, and often these are very poorly prepared to do high-school work.

So much for the schools as they are; now a few words as to their more important needs and some suggestions as to how these needs may be met.

II. RURAL-SCHOOL NEEDS

Longer School Terms.—Probably the most patent need of the rural schools is a very large increase in the average length of school term and a nearer approach to equality in length of term in all these schools. The American school term, even in the cities, is short as compared with the school terms of other countries. In most of Europe the schools are in session from 200 to 250 days. In Australia rural schools run 225 days or more. I know no reason why American boys and girls need fewer days of schooling than those of other progressive and cultured countries, nor do I know any reason why boys and girls in the country need fewer days of schooling than they would need if they lived in city or town. It would be still more difficult to imagine a reason why in our democratic republic made up of these States we should be content to give the children of one rural community opportunity of schooling through only 40 or 50 days when those living in other communities have access to better schools and for three or four times as many days, or why we should as a people be content that the children of one State may have only 90 days of schooling in the year while those of another may have 180 days or more. Surely we no longer think of education as a private matter, affecting only the individual. The public welfare, in which the private weal is bound up, depends on and demands the education of all.

More Money Better Spent.—For longer terms and a nearer approach to uniformity in length, larger tax rates, wiser economy in the use of funds, and in many States larger units of support and administration will be necessary. All these should be comparatively easy of attainment. School taxes are, as a rule, very low and expenditures for education very small as compared with taxes and expenditures for other purposes and with the value and importance of the results. We are yet far from Doctor Eliot's ideal¹

of expenditure for the education of the child equal to that for its food or clothing. In 1912 the total expenditure for all public-school purposes in the United States averaged \$5.05 per capita of the total population. This average ranged from \$1.52 in Alabama and \$1.53 in South Carolina to \$9.18 in Utah and \$9.30 in California. In that year the total expenditure for public schools was approximately \$483,000,000; but only \$285,000,000, less than 59 per cent of the whole, was for teachers' salaries. Teachers' salaries, the most important item in the lengthening of the school term, could therefore be doubled with an increase of less than 60 per cent in the total expenditures. This would give a substantial increase in the monthly salaries of teachers and at the same time lengthen the school term to an average of 180 or 200 days. Since the average for city schools is already more than 184 days, the increase possible by this increase of 60 per cent in the total expenditure might be so used as to bring the rural schools up to the full term of the city schools, even after adding both to the monthly salary of city and country teachers and to the length of the city-school term. Even if no addition were made to the monthly salary of the teacher, the larger annual salary that would come with a longer school term would increase the efficiency of the schools in other ways and especially by putting and keeping in the schools better teachers and giving them more opportunity for experience and enabling them to concentrate their energies to a greater extent on the work of the school. It is the salary for the year rather than for the month that counts. I believe no thinking man or woman with any knowledge of economic causes and conditions will deny that this increase in school funds might be made both easily and profitably. It would be easy to show where much more than this amount could be saved in public or private expenditures without injury to any useful cause.

Larger Units of Support and Control.—Per capita wealth varies sharply from section to section and from one local

community to another and the variations are not always due to the industry or other virtues of the people or to the lack of them. Fertile lands, mines, the convergence of highways and railways, position with regard to natural routes of commerce, for none of which the people of the community are primarily responsible, enable the people of one community to obtain larger results upon their investments of labor and capital than those of another, and possibly to levy tribute upon the smaller returns of others. Therefore, while local communities may and probably should tax themselves for houses and equipment, and to a sufficient extent to insure the maximum interest in the schools, the larger part of the school funds should be raised by taxes levied on all the taxable property, rural and urban alike, of both county and State. In most States half the funds for running expenses for the schools might well come from county taxes and half from State taxes, no county to receive any part of the State funds until it had levied a county school tax of not less than a given minimum. Some part of the school fund should always be set apart to help counties in proportion to their needs. This part might be apportioned to the several counties of the State in proportion to school population (or aggregate attendance) and inversely as the ratio of taxable property to school population, as is done in Tennessee. The idea that the federal government through some modification of its earlier policy by which it gave millions of acres of public lands for the support of public schools should conserve and promote all its most important interests by devoting some part of its large revenues (larger by much than the total revenues of all the States combined) to public education and so apportion its appropriations for this purpose as to even up to some extent at least the great difference in school facilities caused by difference in taxpaying ability in the several *States*, and at the same time give the largest possible encouragement to the States to help themselves, leaving to the States full freedom in the development and control of their school

systems, is too fascinating and at the same time too difficult and wide of application for discussion in this paper; but it is worthy of the most careful consideration of all patriots, economists, and statesmen. The large federal contributions to the States now for vocational education are no more worthily spent than millions more each year could be expended for other objects.

With the larger units of support must, of course, come larger units of control and more efficient agencies of administration and supervision. It is seldom wise to give to small communities funds from what appears to them a foreign treasury without making at the same time suitable provision for its expenditure. Examples of the bad effects of such a policy are too numerous to require specification. In all those States in which the county is the unit for other governmental purposes it should be the unit also for school administration. In the New England States, where the town is the governmental unit, it should also, no doubt, be the unit of school administration, as it is. In the State of New York, with its strongly centralized system, supervision may well be under the immediate direction of the State with its district superintendents as its agents.

Plan of County-School Organization.—In a circular letter sent out some time ago by the Bureau of Education and republished in bulletin 1914, No. 44, the Bureau of Education suggests the following plan of county-school organization:

1. The county the unit of taxation and administration of schools (except that, in administration, independent city districts employing a superintendent would not be included).
2. A county-school tax levied on all taxable property in the county, covered into the county treasury, and divided between the independent city districts and the rest of the county on a basis of the school population.¹

¹ This basis is suggested for the division between the county district and the independent city districts. The county board of education would expend

3 The county-school funds, including those raised by taxation and those received from the State, expended in such a way as would as nearly as possible insure equal educational opportunities in all parts of the county, regardless of the amount raised in any particular part. (Any subdistrict should be permitted to raise, by taxation or otherwise, additional funds to supplement the county funds, provided the subdistrict desired a better school plant, additional equipment, or a more efficient teaching force than could be provided from the county funds.)

4. A county board of education, in which is vested the administration of the public schools of the county (except those in independent city districts), composed of from five to nine persons, elected or appointed from the county at large; the board to be non-partisan; the term of office to be at least five years, and the terms arranged so that not more than one-fifth would expire in any one year.

5. A county superintendent of schools, a professional educator, selected by the county board of education, from within or without the county or State, for a long term (at least two years), who shall serve as the secretary and executive officer of the county board and as such be the recognized head of the public schools in the county (except those in independent city districts).

6. District trustees in each subdistrict of the county, one or more persons, elected by the voters of the district or selected by the county board, to be custodians of the school property and to serve in an advisory capacity to the county board. The expenditures of local funds raised by the subdistrict would rest with the trustees subject to the approval of the county board.

7. The powers and duties of the county board of education:

(a) To select a county superintendent, who would be its secretary and executive officer in the performance of all of its other functions, and to appoint assistants as required.

(b) To have general control and management of the schools of the county.

(c) To submit to the regular county taxing authority estimates of the amount of money needed to support the schools.

(d) To regulate the boundaries of the school subdistricts of the county, making from time to time such alterations as in its judgment would serve the best interests of the county system.

(e) To locate and erect school buildings.

the funds of the county district according to the *needs* of the various schools, not according to school population. This does not mean among the subdistricts on the school population basis.

- (f) To supply the necessary equipment.
- (g) To fix the course of study and select text-books (using the State course and State-adopted text-books in the States where action has been taken).
- (h) To enforce the compulsory education laws.
- (i) To employ teachers, fix their salaries and the salaries of other employees.

Experience shows, I believe, the wisdom of some such policy.

Better State Administration.—In most States there is urgent need of some reform in State administration. Possibly the ideal organization for the State would, in most cases, be a State board of education of seven or nine members, elected or appointed from the State at large, the terms of office for the members expiring in such a way as to reduce to a minimum the possibility of packing the board for sinister purposes. In a board of nine members the tenure of office might well be nine years, the terms of not more than two members expiring in any biennium. This board should elect a State superintendent or commissioner of education and all his assistants from the world at large and should have power to remove any of them for cause. Among the assistants of the chief State school officer should be a sufficient number of supervising specialists and the office should have the power to require prompt, faithful, and intelligent performance of duty by county-school officials.

Ruralized High Schools for All.—In rural communities, as elsewhere, all boys and girls should have free access to good high schools so organized as to give such education as is adapted to the early and middle years of adolescence and to prepare them for the duties and responsibilities of life and citizenship and for some useful occupation by which they may make their living and contribute toward the support of the commonwealth. Let me quote here from my introduction to the Report of the Commissioner of Education for the year ended June 30, 1913:

The complex problems of our political, civic, industrial, social, and spiritual democracy demand of the masses of the people more extensive knowledge of facts and principles than can be given by the elementary schools, and a discipline and training different from any which can be gained in childhood before the years of adolescence. Children learn by imitation and accept and act on authority. In the preadolescent years they are unable to reason inductively to great fundamental principles, formulate them into words, and reason from them by deduction to intelligent practical applications in concrete new instances. But this is just what is most needed for the self-guidance required by democratic institutions and life. The education possible in childhood may be sufficient for citizenship in a benevolent despotism where a "little father" rules over his "children," in a society of rigid and unyielding stratification, in a feudalistic industrial organization in which the masses of people are only unthinking "hands," and in a spiritual despotism in which freedom of thought is unknown; but democratic government, government of the people, by the people, and for the people, is manhood government. Democratic institutions of whatever kind demand of all who participate in them such self-guidance as is impossible without an understanding of general principles and the habit of consecutive, abstract reasoning and individual initiative and self-restraint.

We must find some way of continuing the education of the great majority of children through the high-school period, through the years of early and middle adolescence. Under present economic conditions this will be possible only when we can find or devise some way by which boys and girls may contribute to their own support while attending school, or of continuing their studies out of school. In rural farming communities this is comparatively easy. Where good high schools are maintained in such communities and there are good elementary schools to prepare for them, the per cent of high-school attendance is much larger than in most cities and manufacturing towns.

Better Subject-Matter.—Courses of study in rural schools need reconstruction and redirection. As human beings and as citizens, men and women living in the country have the same or similar interests in the humanities (the term is used in its broad sense) and things pertaining to civic life and citizenship as other people have. But as farmers and farmers' wives, making their living from the soil and living in isolated country homes, their interests

differ widely from those of men and women of the laboring and professional classes in the cities. Whatever may have been the case in the past, it has now come about that farmers need a fuller and more extensive, more varied and thorough, knowledge and more comprehensive grasp of fundamental principles and greater power of adjustment than men in any other trade or profession. The same is true of the farmer's wife as compared with other women. Of the chemistry and physics of the soil, of plant and animal life, of methods of tillage, of the feeding and care of animals, of plant and animal diseases and the means of protection against them, of farm machinery and its operation, care, and management, of buying and selling, of bookkeeping and the business side of farm life, of fertilizers and the means of preserving the fertility of the soil, of the breeding of plants and animals, of road-making and forestry, of drainage and irrigation, of the sanitation of the farm home, of the best use of the food products of the farm, of the care of children in isolated country homes (where the physician cannot be called at a moment's notice and where municipal engineers do not look after every detail of sanitation), of the early education of children, and of many other things on a knowledge of which the success, prosperity, and happiness of the farmer and his wife depend—nearly all country schools at the present time take little account. Their courses of study need to be remade upon the basis of what the farmer needs to know, and their teaching must take into consideration the environment and the raw material and experience which the country boy and girl bring to school.

Need of Rural Surveys.—Just what the course or courses of study in any rural school should be cannot be determined until careful and thorough studies have been made of the vocational life of men and women living normal lives in normal rural communities. Such studies must take into consideration what these men and women need to learn of each branch of knowledge and of its possible and probable

applications in their life-work. As a first step in such a study the Bureau of Education some time ago sent questionnaires to a thousand farmers and as many farmers' wives living on and by their farms in the open country in several different States. The questions were as follows:

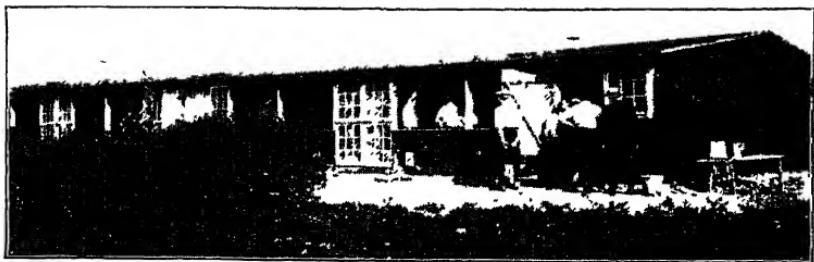
Please state briefly what the farmer should know about

- (1) Physics.
- (2) Chemistry.
- (3) Biology.
- (4) Meteorology.
- (5) The soil.
- (6) Cultivation of the soil.
- (7) Fertilizers.
- (8) Plant life.
- (9) Selecting seeds.
- (10) Propagation by budding, grafting, etc.
- (11) Harvesting crops.
- (12) Animal life.
- (13) Insects and birds.
- (14) Feeding.
- (15) Breeding.
- (16) Marketing crops and live stock.
- (17) Farmers' buying, selling, and credit co-operation.
- (18) Preserving fruits and meats.
- (19) Machinery, its operation and its care.
- (20) Care of trees and forests.
- (21) Keeping accounts.
- (22) Banking.
- (23) Commercial and common law.
- (24) Farm buildings.
- (25) Engineering.
- (26) Road building.
- (27) Farm sanitation.
- (28) Other subjects connected directly with the farmer's life.

It is the purpose of the bureau to send these to other thousands of farmers and farmers' wives and to supplement this by somewhat similar questions for supervisors and instructors in agriculture and home economics in colleges and high schools, and for students of rural economy. But all

these will not help far. They can serve only as a beginning. Thorough, extensive rural surveys must be made by experts on the ground in different parts of the country very much as industrial surveys have been made in Richmond, Minneapolis, and many other cities. There must also be similar surveys as to the duties and responsibilities of citizenship in civic and social life in rural communities and of the preparation necessary for their intelligent and successful performance. When these surveys have been made and a body of necessary knowledges, skills, ideals, and abilities has been formulated, men and women learned and wise in methods of education and of child development must determine which of them can be taught in the schools; how and in what order, and to what extent, and also how they can be organized and transmuted into the things we call discipline and culture; for the man who turns the clods must not be permitted to be a clod himself, even though an intelligent and skilled one. There must be in him also something that aspires and sings.

In the country even more than in the city is it important that there should be a very close co-operation between the school and the home. If the teacher knows how to discover and use it, the out-of-school experiences of country children give them a larger fund of rich raw material for reworking and interpretation in the schools than the out-of-school experiences of city children give to them. For most of the knowledge which should be gained in school by country children there is a readier and wider application in country life than for the knowledge gained by city children in city schools. In making courses of study for rural schools it must be remembered that farming is still a trade, or rather a combination of many whole and complex trades, if, indeed, it should not be called a learned profession, and not a single, simple process or a series of such processes, as is the occupation of many people in the industrial life of the city. Little or nothing on the farm and in the farm home can be



A brooder and laying house, Berks County, Pa.



Poultry club work of Pennsylvania State College



A home-made brooder

"The New Spirit" at work in rural Pennsylvania

done by rule of thumb. The freedom of adjustment that comes only from a mastery of fundamental principles is absolutely necessary. The independent farmer must have the power of self-guidance under complex and constantly changing conditions. To make sure that principles are understood and flexible in their use and that they have real content, they must be constantly tested in practical application. Therefore rural school and farm and home must become as nearly as possible one for the education of the farmer's boy and girl, and each should be intelligent about and sympathetic with the other in a way and to a degree now seldom found.

Professional Teachers.—But no policy of support, control, and administration however wise, and no courses of study however thorough and logical, may be expected to accomplish much without competent teachers. Teachers make the schools and they are larger factors in the making of rural schools than they can be under modern conditions in the making of urban schools. The teacher of a grade or of a subject in a city school is a part of a large and more or less efficient machine, which, once started, continues largely by its own momentum. Her tasks are definite and narrowly limited. It is quite otherwise with the teacher in the small country school of one, two, or three teachers. Here the machinery is light and loosely put together, if indeed there can be said to be any machinery at all. The teacher's tasks are large and indefinite. There are opportunity and need for men of power of initiative and self-guidance. Personality, scholarship, professional knowledge, and the skill which comes from intelligent experience count for more in the country school than they can in the city school. More careful consideration needs to be given to the selection of teachers in the rural schools and to schools in which to prepare them for their work.

We may not hope to offer to all children even approximately equal opportunities for education nor to obtain any-

thing like satisfactory returns from our investments of money, time, and interest in our public schools until in all the States we shall have higher and more nearly uniform standards of qualification for teachers, which standards for teachers in rural schools must include a good beginning at least in knowledge of rural life, rural occupations, and rural economics. At present we are giving some kind of professional preparation to only a small per cent of those who are to become teachers in the rural schools, and only in a few normal schools does this preparation include even a good beginning in those things which pertain especially to the work of the rural schools. I have already stated that in a study of rural teachers in 55 typical counties, representing all the States of the Union, Foght found that only 3.4 per cent of the 2,941 teachers replying to the questions sent to 6,000 teachers were graduates of any normal school, that only 26.5 had attended normal schools at all, and that only 20 teachers out of the whole number had attended schools giving special preparation for rural school work. For many years we have maintained normal schools at the cost of taxes paid by all the people in country and city alike, but in most States almost all the graduates of these schools have found places as teachers in city schools and the country schools have been benefited very little. If graduation from college with some work in courses in education or from public or private normal schools or from high schools with teacher-training courses be accounted the minimum adequate preparation for teaching—and certainly nothing less should be so accounted—then we are not preparing anything like a sufficient number of teachers to meet the yearly demands for new teachers in the public schools. In 1912-13 there were in such schools and courses as I have named approximately 135,000 students, about 28,000 of whom graduated in the spring of that year. In the summer and fall of 1913 more than 100,000 new teachers were needed in the public schools alone. If all these

graduates of the spring had begun teaching in the fall, more than 60,000 places would have remained to be filled by new teachers without the minimum of preparation indicated by the fact of graduation from a school of one of these kinds.

I must be permitted to enter here a firm protest against any idea that we are to be content that teachers may continue to be admitted to work in the rural schools with such meagre academic and professional preparation as may be gained in high schools of four years with a little time given in the fourth year to the history of education, psychology, methods of teaching, and school management. That such preparation may be better than most rural teachers now have I admit, but I have already called attention to the fact that the rural teachers have more difficult tasks to perform and therefore need more thorough and comprehensive preparation than city teachers. The training courses in high schools and county normal schools may be necessary as temporary makeshifts and as stepping-stones to something better, but to accept them as permanent means of preparing rural teachers would be to condemn forever the rural schools to inefficiency and rural life to poverty and futility. If the American people are in earnest about education and about the betterment of country life, they must demand of rural teachers higher standards of preparation and see to it that schools with adequate standards and appropriate courses of instruction are maintained in sufficient numbers for their preparation. I know of no important culture country whose teachers are so poorly prepared for their work as are the majority of rural teachers in most of our States.

Consolidation of Schools.—But even with all teachers prepared reasonably well for their work the rural schools must continue to be inefficient and unsatisfactory if most schools are to continue to be one-teacher schools and if teachers are to continue to change from place to place as they now do. No teacher can teach well twenty-five children of all ages and of all grades of advancement from the

first grade to the high school. Thirty-five classes a day with a teaching time for each class of from four to twelve minutes will continue to baffle the skill of the best. Even if by skilful combination the number of classes in such schools should be reduced to twenty, as I believe they may in most schools, the number would still be too large.

The coming and going of teachers, reducing their work to a kind of day labor, is still more detrimental to the work of the schools. For successful teaching much more is necessary than knowledge of subjects taught and of methods and devices of teaching and school management. Teachers must know something of the powers, capacities, tendencies, weakness, and strength of the children they teach. Such knowledge implies a knowledge of their parentage. They must know something of their experiences in the home, in the field, in the shop, at work and at play, and in association with kindred and friends, else they will not know how to use the results of these vital experiences as the raw material of lessons to be learned in school. They must know something of the contemporary home life of the children, their occupations and interests and their relations to their parents, else they will not be able to bring about that close co-operation between school and home and the unity of school and home interests without which the work of the school cannot be made to take hold on the lives of the children. They must know the details of the work which the children have done in the lower grades that they may use the knowledge gained in these grades as the basis of new lessons to be learned, and that the children may learn and interpret the new in terms of the old and dovetail the one into the other in such a way as to make the work of one year a development and continuation of that of previous years. They must know something of the inner life of the children, of their ideals, hopes, and dreams of the future, else they will be unable to make the lessons of the school take hold on these, modifying them and being enriched by them.

as they must be before the school, its lessons, and its disciplines can be made to project themselves into the future and take hold on life as they should, and as they must be before they can become fruitful in deeds, in life, and in character.

III. SUGGESTIONS FOR IMPROVING SUCH CONDITIONS THROUGH CONSOLIDATION

As a means of bringing about such a consolidation of schools as will obviate the necessity of one teacher attempting to teach children in all the grades of the elementary school and at the same time secure a longer stay of competent teachers in the same schools together with many other desirable improvements not otherwise possible, I make the following suggestions:

1. That in all States *the unit for school administration* be made as large as possible—the town in the New England States, the county or parish in most other States—so as to permit the greatest possible freedom in forming single-school districts and adjusting their boundaries to geographic features and the outlines of settlements, and to insure to all schools of the township or county equally adequate support.
2. That *the school laws* of all States should make it easy for town and county boards of education to co-operate in forming union districts of territory from two or more townships or counties and in establishing, maintaining, controlling, and supervising schools in them when this is necessary to the best interests of the people.
3. That careful *surveys* be made of the territory of all school-administration units and that on the basis of these surveys they be divided into school districts of from ten to fifteen square miles each, the exact size and shape of any district depending on physical features, location and character of roads, means of transportation, density of population, trade centre, and other conditions. Where roads are

numerous, good, and convergent, the district may well be larger than where they are few, bad, and parallel or perpendicular to each other. Twelve square miles, three by four or three and a half miles square, will probably be a good average in two-thirds of the towns and counties of the country. The Bureau of Education is now making a careful and exhaustive study of the possibilities of organization on this basis. It is already apparent that in most counties the number of schools may be reduced by one-half, in many by two-thirds or three-fourths, and in some by as much as four-fifths or five-sixths. In some counties of Pennsylvania and probably of other States as many as eight one-teacher schools might be brought together in a territory of this size.

4. That at the most suitable and accessible place in each consolidated district a *good schoolhouse* be built, attractive, comfortable, and sanitary, with classrooms, laboratories, and library equipped for the work which such a rural school should do, and an assembly-hall large enough, not only to seat comfortably at one time all the pupils of the school, but also to serve as a meeting-place for the people of the school district.

5. That on the school grounds a house be built for *a home for the principal and possibly also for other teachers*. This house should not be expensive, but neat and attractive, a model for the community, such a house as any thrifty farmer with good taste might hope to build for himself.

6. That as a part of the equipment of the school there should be *a small farm*, from four to five acres or more if in a village or densely populated community, and from twenty-five to fifty acres or more if in the open country. The principal of the school should be required to live in the principal's home, keep it as a model home for the community, and cultivate the farm as a model farm, with garden, orchard, poultry-yard, small dairy, and whatever else should be found on a well-conducted, well-tilled farm in that community. He should put himself into close contact with the

agricultural college and agricultural experiment station of his State, the departments of agriculture of State and nation, farm-demonstration agents, and other similar agencies, and it should be made their duty to help him in every way possible. The use of the house and the products of the farm should be given the principal as a part of his salary in addition to the salary paid in money.

7. That after a satisfactory trial of a year or two a *contract* should be made with the principal for life or good behavior, or at least for a long term of years.

8. That the *school sessions* be adapted to the industrial needs and climatic conditions of the district. It is not necessary that primary and advanced pupils attend at the same time. In the North and in mountainous sections primary children should attend school in the spring, summer and fall.

The Consolidated-School Centre.—In this way it will be possible to get and keep in the schools men of first-class ability, competent to teach children and to become leaders in their communities. The principal of a country school should know country life. A large part of country life has to do with the cultivation and care of the farm. The best test of knowledge here as elsewhere is the ability to do. The principal of a country school in a farming community should be able to cultivate and care for a small farm better than any other man in the community or at least as well. It may be true that "those who can, do; and those who can't, teach," but it should not be so. It must not be so if the teacher is to do the work and have the influence in the community that he should.

The school-farm will, of course, serve as a demonstration farm for the district, with the principal of the school, to some extent at least, as a farm-demonstration agent, directing the home work of boys and advising the men as to their work and the whole community in many important matters of citizenship and life.

I am assuming that the principal of the consolidated country school will be a man. As a rule, it should be so. In every school attended by large boys there should be at least one man; other teachers may well be women.

The increased prosperity and wealth that would come to any community with such a school as would be possible under the plan suggested would soon enable it to pay sufficient salaries to obtain the services of men and women of the best native ability, education, training, and skill. Any man who ought to be allowed to teach as the principal of a country school in a farming community can make the use of such a home and school-farm worth to him as much or more than the money salary now paid to rural-school principals anywhere in America. Under the plan suggested the principal's wife might in many instances become the leader of the social life of the community and help in making the teacher's home and the school a social centre. She might also assist the women teachers in extending the school work to the homes of the district, making the work and the care of the homes more intelligent and tying the women and their homes to the school as the principal would tie the men and their farms.

The plan here suggested would not prove very costly. If bonds were issued to pay the first cost of house and land, by the time the bonds matured the increase in the value of the land would in most communities amount to as much as its first cost and the community would have at a comparatively small cost property of a much greater permanent value.

After a long and careful study of the problems of the rural schools I see no other way in which any thoroughgoing permanent improvement may be wrought out for our rural schools in most parts of the country. But this way is clear and practicable and the principles involved are not untried in this country and elsewhere. Its general adoption would increase the value and efficiency of the American rural

school more than we can now understand. Anything that will add in even a small degree to their effectiveness is worthy of careful consideration and patient trial.

PROBLEMS IN APPLICATION

1. To what extent has consolidation been accomplished in your home State?
2. What per cent of these schools are simply graded schools in the country without the other features necessary to make them first-class ruralized schools?
3. What per cent of the one-room schools in your State have modern school plants with trained teachers and satisfactory rural courses of study?
4. What changes, if any, would be necessary to establish the county-unit system of school administration in your State?
5. What are some of the things that rural pupils most need to learn in school?
6. Can these well be provided economically in single-room schools?
7. What suggestions are given in the chapter for securing satisfactory consolidation?
8. How are bonds obtained for building consolidated schools in your State?
9. How much money would be available for a consolidated school if the appropriation for each child equalled ex-President Eliot's standard of the amount spent for its food and clothing?
10. How can such expenditures be justified in the minds of country people? What per cent of this sum should be paid by the consolidated-school community, the county, the State, and the nation?

BIBLIOGRAPHY

1. Recent reports of county and State superintendents of public schools and the United States Bureau of Education.
2. Surveys of rural schools and country life.
3. Carney—"Country Life and the Country School." Row, Peterson & Co.
4. Foght—"The Rural Teacher and His Work." Macmillan.
5. Arp—"Rural Education and the Consolidated School." World Book Co.
6. Cubberley—"Rural Life and Education." Houghton, Mifflin Co.

7. Hart—"Educational Resources of Village and Rural Communities." Macmillan.
8. Vogt—"Rural Sociology." Appleton.
9. Field and Nearing—"Community Civics." Macmillan.
10. Smith—"Educational Sociology." Houghton, Mifflin Co.

SOME TYPICAL SURVEYS

- A. State surveys by the U. S. Bureau of Education:**
 1. Educational survey of Wyoming.
 2. Educational conditions in Arizona.
 3. Educational survey of Tennessee.
 4. Educational survey of the schools of South Dakota. .
- B. Self surveys by States:**
 1. Minnesota, State Department of Public Instruction.
 2. Wisconsin, State Department of Public Instruction.
 3. Missouri, State Department of Public Instruction.
 4. Montana, State Department of Public Instruction.
 5. Pennsylvania, State Department of Public Instruction.
- C. By boards and bureaus:**
 1. Public Education in Maryland, by the General Education Board, New York.
 2. Surveys of a number of rural counties by the Presbyterian Board, New York.
 3. Sanitary survey of Porter County, Indiana, and others, United States Public Health Service.
- D. By universities:**
 1. Survey of Lane County, Oregon.
 2. Survey of a county in California, by Williams, published by the United States Bureau of Education.

CHAPTER III

COMMUNITY ORGANIZATION AND CONSOLIDATION

PRELIMINARY PROBLEMS

1. Describe some rural co-operative enterprise, such as a creamery, elevator, or store, of which you have knowledge.
2. What has led to these "getting-together" movements?
3. Why are not more of these organizations established?
4. What forces have favored and hindered such co-operation?
5. Do the best farmers to-day attempt to "raise all they need for the family" as in 1850? Why?
6. In what ways does specialization in farming lead to greater world-wide connections?
7. How does the consolidated school enlarge the acquaintance unit of a rural community?
8. Why do farmers so frequently "move to town"?
9. Is farm tenantry a good or bad thing socially?
10. In what ways are the interest of the farmers and the rural village trading-centre identical?

As has been ably set forth in the preceding chapter, the community gives character to country life in our time. This is another name for the organized neighborhood. The name describes the people with their properties and institutions who live within easy reach of one another in the country. The community is the habitat of a farm family. In it personal acquaintance takes on a very intimate form and verifies personal character. In the country community everybody is known to everybody else. The weak are known to be weak; the honest are known to be honest. The reason for this is in the fact that those who farm cannot go far from home, and must return to the farm practically every night. Therefore, acquaintance with those

near at home is very close. With persons outside the limits of the home community acquaintance is scanty. The community in the country intensifies acquaintance but limits it.

Upon this acquaintance unit are based all the new social institutions of rural life. The co-operative credit unions depend upon personal acquaintance for their security. The co-operative creameries and grain-elevators could not admit to membership men not known well to their fellow members. Likewise consolidated schools take a district as large as the circle of personal acquaintance and co-operation activity for their legislative boundaries. Federated churches assemble all the people who can attend their services by a convenient team-haul or automobile-ride.

I. NECESSITY AT WORK

Economic forces are moulding anew the social form of country life. The chief of these forces are in the city which acts as an assembly of people who do not produce raw materials. The city depends for the supply of such materials upon the people in the country, at the same time so adding to the value of these products as to create a demand for the finished articles such that even the farmer must buy of the city.

It must not be lost to sight that the city is the central fact or expression of the forces which to-day mould country life. The necessity which forces country people, prone to household forms of existence, to organize their households into communities is imposed by the cities.

The World Market.—The second fact which is to-day remodelling the form of the country community is the international character of the market. This is often expressed in the term "the world market." Of this world market the cities are the centres, but the remotest farmhouse comes to that world market as a customer. Few or none are the households in mountain-coves where to-day men wear

homespun. Few are the renters or "croppers" who do not "live out of a store." I have seen the transformation in remote settlements where a self-sufficing industry prevailed twenty-five years ago. To-day these people are so eager for the cash with which to buy "store-clothes" that the man of the house, father often of six to ten children before he is forty, journeys many miles to seek employment upon railroad or lumber enterprises in order that he may, by working most of the weeks of the year in a camp, enable his children to wear what others wear and eat and enjoy what others have. The opulence and cheapness of the city markets, which are furnished with all that England or China produces, tempt every member of a self-sufficing household to become a wage-earner and so to become a consumer of other men's and of other nations' goods.

Communication and Transportation.—Transportation is another name for a force which, with the power of necessity, irresistibly moulds the social life of the country and makes it over into the community form. The goods, the people, and the news from all the world are brought into every region. Country people come to see that they must associate themselves into community organization in order to secure and to enjoy what the world sends. A good illustration of this use of the neighborhood form is in the Chautauqua entertainment, to which country people are devoted. Most of these organizations for the hearing and seeing of celebrities, lecturers, and entertainers are village or open-country affairs. The system has had to accommodate itself to the community form. The local Chautauqua is an illustration of the social form country life takes in utilizing world ideas and enjoyments. *The consolidated school is a form of community organization made necessary by the desire of country people to learn in the world school.* Of all these forces the city is the centre and the expression.

II. HISTORICAL REVIEW

Household organization is a permanent form of country living. It is older than America—as old as Deuteronomy. When there were no cities in America the household was self-sufficing. Socially and economically it maintained itself, depending upon other households only as convenience or as exigency demanded. Co-operation was for emergencies only. What was needed was made on the premises. Stores were mostly places of exchange of neighborhood goods. Schools were one-teacher supplements of the home learning; for the parents considered themselves the proper and sufficient teachers of their children. Churches were places of meeting, often irregularly used, in which religious services were supplementary to those of the family. Their doctrine was patriarchal, a family interpretation of Christianity. Such social life is still somewhat common. But wherever the household rules the countryside it indicates that the city and the world market have not yet effected the reorganization which is inevitably and rapidly approaching.

Before 1870 household farming was the rule. There was no other form of social organization except that which, like the one-teacher school, supplemented the household. Now the emergence of determining institutions of a community sort signifies that a new era has come in American country life.

Solitary Farming.—When free land in an earlier day affected vitally the organization of American life, it created the individualistic type of person, which has always in American history exerted a great influence. Land so free that it was of no value intoxicated the children of European serfs and bondsmen and almost set them mad with the spirit of independence. They began to idealize personality, to magnify the value of individual opinion, of private property, and to regard individual freedom as an ultimate ideal instead of a means to spiritual and social ends. Yet individualists did not forswear the world. They did not be-

come monks or nuns. Hermits and individualists are not alike, but most unlike. And as American individualists live very much in society there have been many clashes and conflicts between their theories of the freedom of the individual will and the obligations of an organized society. Yet that earlier time has made in our history an indelible impression, contributing to our philosophy, religion, and education the individualistic elements which idealized the loneliness and isolation of the wilderness life.

The Migrant Farmer.—When the homesteads were given away—free land offered in a legalized form—to those who had come to set value upon land, we find arising in America a new social type, the migrating farmer. Migration, especially between 1870 and 1890, has had lasting effects upon American country people. Families went westward, leaving behind many of the social elements of life, and founded neighborhoods without traditions, churches without creeds, schools without culture, and industries without reserves of capital. The history of the Western States is only now emerging from the period wherein the effects of an artificially formalized migration which attempted in twenty years to set up in uniform ways over all our domain the social culture based upon farming that the Eastern States had matured in the slow growth of two hundred years. Often the social forms are there, but the value of them is absent. The homesteading process degenerated into a speculation in land, in timber, and in minerals, and this has often debauched the government's high purpose. The migratory social forms are temporary, as the exploitation which followed the migration is to be temporary. For our present purpose it is enough to record the force of the migration in its effects upon such institutions as the school and the church. They have not been advanced nor perfected by the period, with its artificial "homesteading." The improvement of the schools has come from the older settlement, not from the newer.

The Exploiters of Land.—There followed the year 1890 a period of exploitation of farm values which produced social forms not before seen in America. The retired farmer appeared first in the Middle West, having sold his homestead in order to secure in cash the land values which he had not earned. Securing perhaps \$100 per acre for lands which he had received free from the government, he came to live in town with that freedom from social obligation which one might expect in a man who could regard land bestowed by the State as a private possession. The retired farmer has a bad record, for his situation has been one of slavery to hostile necessities. He has ever been known as the foe of all community progress. Succeeding him has come the landlord, a type different only in his holding his lands for a bigger rise in price instead of selling. The American farm landlord has usually been an absentee, living in town away from his farm, and a social absentee, in that he has insulated himself from responsibility for the social improvements which his properties were expected to support. We have, for example, known owners of five-thousand-acre tracts in Illinois and in Texas to command their tenants, on penalty of losing their leases, to vote against school consolidation.

The children of tenants really require a better school than the children of owners, because their home resources are more meagre, but the American landlord, bound by no legal requirements, sense of social responsibility, nor social usages, such as usually determine the conduct of European landlords, has persistently declined to improve the local school, church, or playground. Being an exploiter, he has regarded only the financial advantage of his position. Being a speculator, he is waiting for the cash gains of increased land prices, not for the more remote but sound economic rewards of more intelligent agriculture.

The Tenure of Land.—The farm tenant, or “renter,” as he is usually called with fine precision, is “in a worse condition than that of any European tenant.” He has, as a

rule, a lease of only one year. He can secure no better, because the landlord expects to sell and will not encumber the property. The tenant usually desires no longer lease, because he hopes to "skin the land," and actually does often get a better reward from the year's work than the landlord receives. The land, which is essentially an asset of society and of the community, has to pay the costs of this expensive exploiting process. It is true that not all landlords nor all tenants are as bad as the type, but the situation is unprotected by legal safeguards, and the pressure of economic motive works out just about as we have described. In counties of the Middle Western States, in which tenancy rises as high as fifty, or even seventy, per cent of the population, the social improvement of the community is retarded while financial gains are being made. The means of money-making are provided while the schools and roads are left by the local authorities just where they were in the time when the farm household was self-sufficing. Some money is made in the present at the expense of present and future character and social efficiency. Money eclipses men.

III. ORGANIZED SOCIETY IN CONTROL

Social control has come to the farm. This control is enforced not by the State but by the city, the railway, and the market. The State has little direct control over the farmer. In the city, policemen have much to say about the daily conduct of affairs; but in the country, social control, not a whit less potent, is exerted by international prices of wheat or beef, by railway and mail influences, and by the compact will of the masses of consumers whom "the farmer feeds." The *husbandman* has come into existence under these conditions, that is, the farmer who farms according to social control. He is characterized by two new elements, not in other types of countryman observed: he co-operates and he uses scientific methods.

Wherever husbandry appears there are found colleges of agriculture and schools capable of carrying into the local community the teachings of the laboratory and of the experimental farm. Husbandry always organizes in the form of such co-operative enterprises as grain-elevators, creameries, egg-gathering associations, and credit associations. These educational and business forms are expressions of the community. They are always of the size of the community. They depend upon one another. Without the trained minds developed by and in the consolidated-school district, co-operation cannot endure. Without the distributed profits which co-operation alone can assure, better education will be impossible.

Temporary and Permanent Forms.—The household and the community are permanent forms. The individualist, the migrant, and the exploiter are temporary; they may appear and reappear and constitute an always present fringe, but these are farmers in the way of becoming something else. The country must depend upon households to till the soil. The household group is God's plough for breaking the sod of nature and reducing chaos to fertility. Families alone can endure in the country. Persons are nothing in the contest with nature; the household group is everything victorious, fruitful, productive. The individualist is an antisocial tiller of the soil. The migrant and the exploiter, produced as they have been by necessities expressed in legal terms, are temporary social forms. The household and the community are the permanent forms of rural society.

While the household was self-sufficing it dominated the country. Roads were not of primary importance. Schools required to be only handmaids of the home, and the one-teacher school did very well in the narrow place allowed by the parents to any teacher other than themselves. Churches were forums of the opinions which thoughtful patriarchs held. Doctrinal argument was the chief duty of the church.

Spiritual nurture, like intellectual culture, had no need to rise above that fitness which a man requires who lives among his kindred on an isolated farm.

IV. THE COMMUNITY AND THE WORLD

Integration.—With the emergence of cities—whose causes are not here being explored—country people have been obliged to form themselves into communities. It is rightly said in some sections: “We have no community here, only a settle-ment.” Men have settled there and stayed but they have not co-operated; they have not been drawn together by the study of the marvels of transportation and of international commerce. When the first foods have come from afar—sugar from Cuba more tasty than sorghum, bananas from the tropics cheaper than native apples, ginger in Chinese wrappings more salable than spruce-gum—*then the process has begun which will not end until the local community has organized for the manufacture of its raw products and their sale in the interests of the neighborhood purse.*

With the coming of intelligence about the great world, it is no longer sufficient to be taught to read and write and cipher; a great competition sets in requiring the local community to educate its children until eighteen years of age in the best learning and culture of the times. This involves the creation of institutions as large as the country can afford. The household farmer kept his institutions small, in order that he might live at home in a maximum degree. The community farmer makes his schools, his churches, and his business enterprises as *big* as he can, on the principle of modern economy and for the further reasons that leaders adequate to the country business are few and the larger the grouping the better the chance of finding a leader.

A Larger Unit Needed.—The household is inadequate because its members go away, leaving it diminished in size. The stronger go and leave the weak; the leaders go and

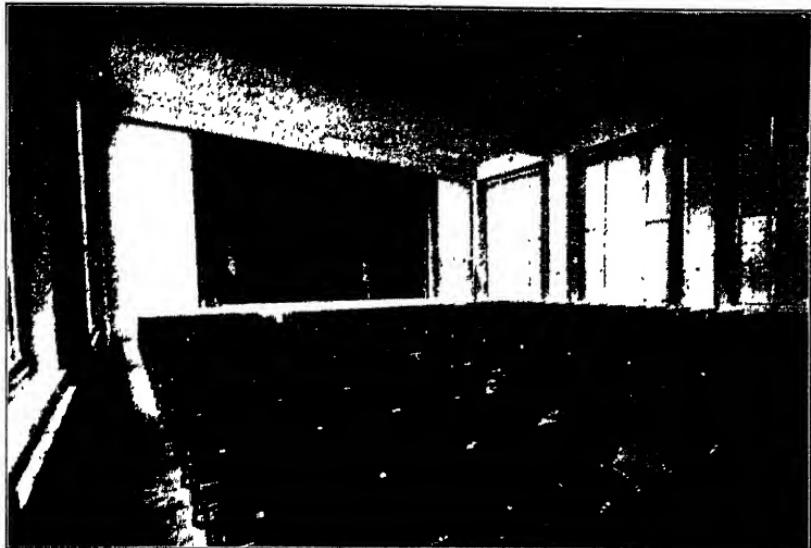
leave the tame and docile clustered in the farmhouse, without initiative and without defense. The household is educationally inadequate; and the one-teacher school which is its handmaiden has no abilities with which to command any situation. The content of modern teaching cannot be written on the small blackboard of the one-room school, any more than the passion of world service can be embodied in a church without either a pastor, an organization, or a social philosophy.

When wheat is priced in London, wool prices are fixed by the Australian fleece, butter dominated by Denmark, beef by Argentina, and American cotton lifts its white boll to greet the cotton of Egypt, then community organization begins to be talked of in every farming country. Tillers of the soil all over the world say "farmers must organize." In all lands, from Japan to Oregon and back again the other way, the form of permanent organization is as big as may be, consistently with the absolute necessity of personal acquaintance. Farmers who organize must trust one another, and the basis of trust is the verifying of personal character by personal acquaintance. This means in business the co-operative unit. It means in education the consolidated school. It means in religion the federated church.

The Enlarged Horizon.—The organization of country people to confront the world is the community, and as a natural thing the community is as large as possible. Its size is limited only by the team-haul. As soon as the automobile shall have superseded horse-drawn vehicles the country community will be made larger. The spirit at work in it is one of bigness. In this the present time differs from the period of household farming, for in that time men idealized the small neighborhood. The family was self-sufficient, with its mind concentrated upon itself. Men did not look afar, but very intensely at home. Now the farmer or villager is offered broad views of the world and he must seek broad relations with his neighbors.



Cast of "Midsummer Night's Dream" as presented by the school children
of Rockingham, N. C.



A school assembly room
A place where the whole community may congregate

Reasons for this are found in the fact that open-country communities are less populous than they were before machinery displaced farm-hands. Village communities are based upon commercial enterprises which of their very nature seek enlargement. The margin of profit being small, merchants and agents, lawyers and contractors, physicians and commission men who make up village populations, seek to enlarge their community boundaries by extending their clientele. Thus the village-centred country communities are to-day as big as they can be.

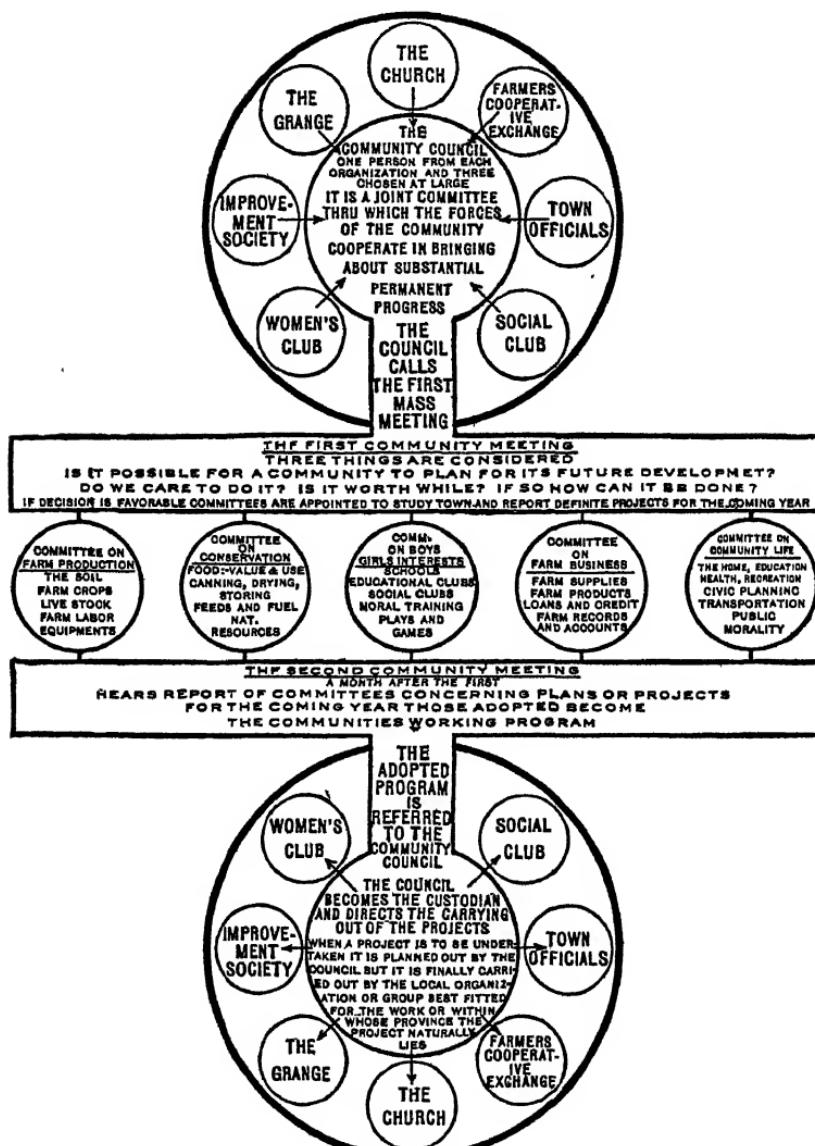
The dominant type of farmer in this era of the social control of agriculture is a man who respects bigness. He wants big machinery, big cattle, big horses, and he aspires to till an acreage up to the economic limit. Such men have a great influence in the direction of enlarging the community. Their influence is always exerted toward an enlistment in the big world in as big companies as possible. They are impatient of little churches, of petty educational work, and of country life too localized. As this type of husbandman attains a greater influence in the country, community organization takes the place of tiny "settle-ment" organization. The sense of neighborhood is extended to a larger circle. But always within the limitation that *the community can be as large as personal acquaintance and no larger*. The consolidated school is a great invention for enlarging, enriching, and refining this acquaintance unit. Here is one of its dominant aims.

V. COMMUNITY WAYS

The internal organization of the country community is peculiar to itself. Among European and American rural populations it partakes of certain characteristics which, if the term be not misunderstood, may be called "democratic." The country community, with its radius of five and diameter of ten miles, is just about big enough to dis-

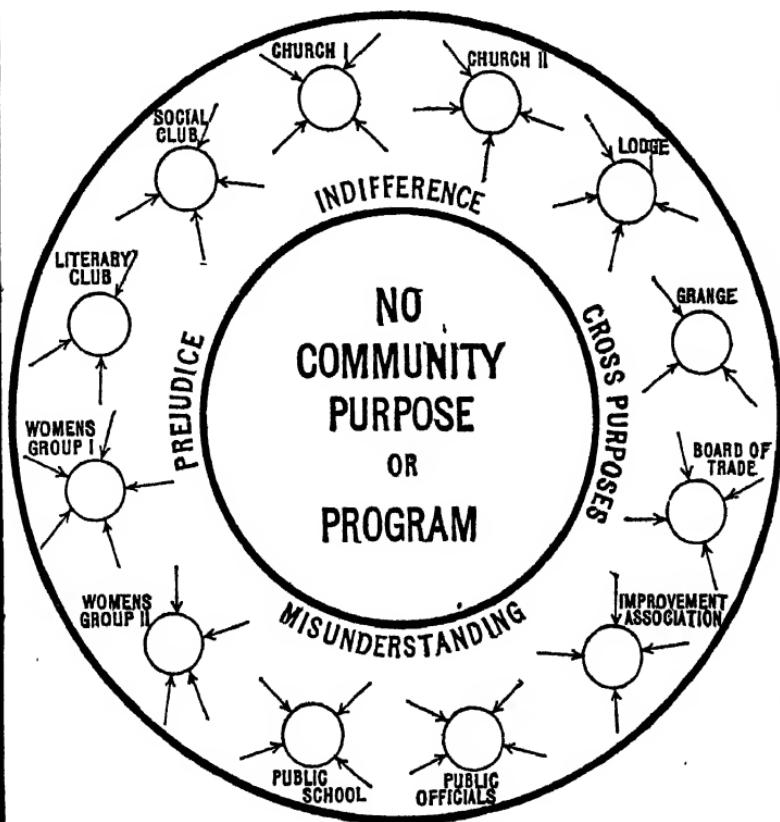
WHAT THIS COMMUNITY DID

IT MOBILIZED FOR RESULTS



WHAT ONE COMMUNITY FOUND

— ORGANIZATIONS SELF-CENTERED —



cover leaders and to correlate personality with leadership. As the rule in all community organizations, financial and other, one man has one vote—at least there is a limit put upon the power of any one man, such as to reserve for personality a secure place. In a Middle West grain-elevator organization, for example, one man may own four shares, but he may have only one vote in the control of this community enterprise.

Another way of the country might be expressed in the term *country-mindedness*. Granges exclude those who are not in businesses which insure their having rural sympathy. Country communities are jealous of outsiders. In some way the man of influence must belong to the sacred industry, the fellowship of those who till the soil. He must know the fight with nature from personal experience or they will not work with him. Farmers believe themselves to be in an industry set apart, unlike any other, but necessary to all others. To be country-born, to till and own, to be a country-school teacher, minister, or physician, or of some essentially related trade, is necessary if one is to get within the circle of rural influence.

The functions of the country community, which must be locally performed, are production, with its attendant tasks of breeding, orcharding, and so forth; manufacture of raw materials raised; the final organization of credit, in exchanges of borrowers; education in schools which teach the child until he is eighteen years of age during the period of his enlargement upon the whole world; and religion, in the congregation of worshippers. Social welfare among country people requires a community performing these in a maximum degree. The consolidated school is the natural outcome of social evolution, in which personality bursts the confines of family and merges with community and world experience. This thought will be amplified in the following chapter.

SUMMARY

The country community is the acquaintance unit, the habitat of the farm or village family.

Necessities of life determine the form of the social unit of country life.

Household organization has been superseded by community organization, with several intermediate and secondary types, such as individualist, migrants, speculators, all created by the forces of necessity.

The husbandman is the countryman who responds to social control of the whole world, which centres in cities, railroads, and markets.

To the world control the household is not adequate, and the community, because it is bigger, a better field of leadership and a safer arena of personality, is consciously organized by husbandmen in co-operative business and consolidated schools.

PROBLEMS IN APPLICATION

See end of next chapter. These two chapters may be considered as a unit, both dealing with the forces which enlarge the rural social mind in its knowledge, habits, and ideals to county-unit and consolidated-school size. These forces lie at the basis of all school reform and must be thoroughly understood in considering democratic modes of advance in our country. These social forces are frequently overlooked and underestimated in attempting to establish consolidation. Democracy is a mode of living in which all gain education and growth by participation and sharing social responsibility. Communities must grow to the co-operation level before consolidation of interests and efforts will flourish. The school is both an outcome and a potent cause of such social development.—ED.

BIBLIOGRAPHY

See end of following chapter

CHAPTER IV

RURAL ECONOMICS AND CONSOLIDATION

PRELIMINARY PROBLEMS

1. See those at the beginning of the preceding chapter.
2. What is the unit of school organization in your county? What is the unit of civil (governmental) organization? What is the unit of trade, of buying and selling? Are these the same? Should they be?
3. What has the rural church done in any community with which you are familiar in promoting the broader social mind and spirit of co-operation necessary to consolidation? What could it do?
4. If possible give an example of a church that promotes broad community organization and consciousness. (See chaps. XVII and XVIII of Vogt's "Rural Sociology" and chap. IV in Foght's "The Rural Teacher and His Work.")
5. Examine the writer's volumes on "Rural Economics" and "Handbook of Readings in Rural Economics." Macmillan.

I. SOCIAL UNITY PRECEDING CONSOLIDATION

Need of Neighborhood Self-Consciousness.—One of the greatest obstacles in the way of an effective organization of rural communities for the co-operation of consolidation or anything else, as shown in the preceding chapter, is the difficulty which the people have in realizing their own unity. The perception by the people that they really are a community must precede any effective organization. The basis of all community of action is *territorial unity*. There should also be racial unity and ideational unity, but without territorial unity the others can scarcely exist. Whether we are speaking of the great community called the nation or a small community called a neighborhood, the principles are very much the same.

Suppose, for example, we were to try to realize the unity of the great community called the nation under the following conditions: Let us suppose that for purposes of military defense the present territory of the United States was included with its existing boundaries, coasts, and frontiers. Then let us suppose that for purposes of civil administration the territory west of the Mississippi River, and also Mexico and Alaska, were a unit and were entirely separated from the territory east of the Mississippi River, which might include a good part of the Dominion of Canada. Then suppose that for purposes of education the old Mason and Dixon's line were taken as the dividing-line between different systems, all of North America north of the Ohio River, including the Dominion of Canada, being treated as one unit, and all south of the Ohio, including Mexico, being treated as another unit. In this mixed-up state of affairs it is apparent that none of us would have a very clear idea as to what our nation was.

We are to-day suffering from some such confusion with respect to the small community known as the neighborhood. Most of us have rather vague ideas as to what our neighborhood is. For *educational* purposes (1) we have, for example, one territorial unit. For *marketing* purposes (2) we have another, more or less understood but not usually found located on our maps. That is to say, farmers will drive a certain distance to a certain town or trading centre; the territory which is tributary to that centre is not very well marked, and does not coincide with any political boundary. Then for purposes of *civil administration* (3) we have the town and township, the county, etc. I am afraid that we shall never develop the genuine neighborhood conscience until we achieve something like unity in these three interests. The school district, the civil township, and the economic unit should coincide as nearly as possible. When farmers have to go to one place on election day, to another place for trading and shipping, and to still a third for their

school meetings, they cannot be blamed for their lack of neighborhood conscience. Where the school and the civil administration and the market-place are in the same centre, with the same territory tributary in all three respects, it is possible to develop a genuine neighborhood conscience. This, in my opinion, is one of the strongest economic reasons for the consolidated school.

The Economic Boundaries.—However, I think danger may some time arise. The work of consolidation may go too far. The territorial unit which should be included in a school district should not be greater on the average than the township, though in sparsely settled regions it might be larger. If the boundaries of the township can be redrawn so as to coincide with the boundaries of the marketing district, still another advantage will be gained. If the school district should be made too large, it might defeat the development of the neighborhood conscience as surely as though it were too small.

It seems to me that the determination of the boundaries of the consolidated district should be a part of a general plan for community building and should not stand alone. If the planning is done with a view to the administrative efficiency of the school system and that alone, some very large and important social interests are certain to be neglected. Because the small single-room school district of the old type does not coincide with any other economic or social unit is, in my opinion, one of the chief reasons for condemning it.

One of the first objects which the consolidated school ought to achieve is to acquaint the pupils intimately and comprehensively with their geographical habitat; that is, with the geographical features of the school district. There should, for example, be an outline map of the district painted permanently on the blackboard, showing not only the boundaries of the district but every road and by-road, every creek and swimming-hole, every important hill and valley, the boundaries of every farm, the location of the

farm buildings, and even the boundaries of the fields on the farm, with something to indicate woodland, pasture, and ploughland. Then from year to year the crop which is growing in each field could be indicated by means of colored chalk. With this map constantly before the eyes of the pupils, and with constant encouragement to correct it, complete, and fill it in, indicating from week to week the condition of the crop in each field, the pupils would begin to know their own geographic habitat. Again, they should be made acquainted with the products of the district and the outlets of the inlets.

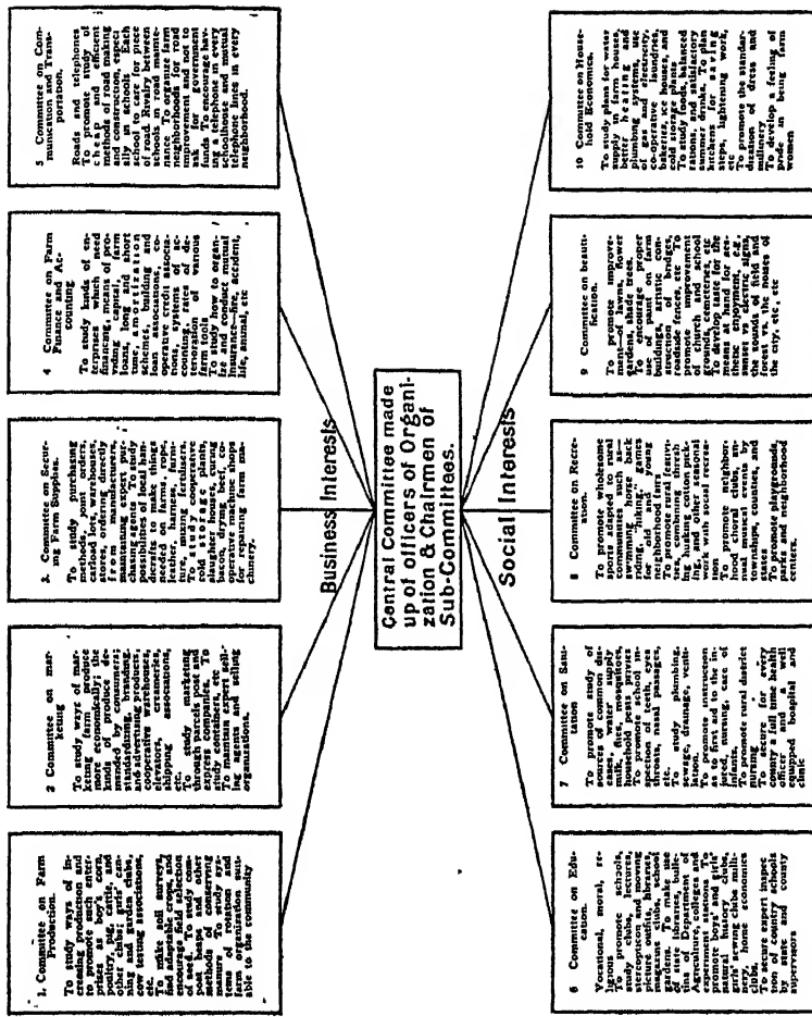
When the school district coincides with an economic unit, that is, when practically all the farmers of the school district do their marketing at the same place, this is made possible; but it is hardly possible with the school district as it is now organized in many of our States. The pupils, or at least the older pupils, should know from year to year what is shipped out of the school district and at least the larger items which are shipped in to supply the needs of the district. When every person who grows up within a school district is thus familiar with the basic economic facts regarding it, there will be knowledge enough to form the basis for neighborhood discussion; and out of this will grow something which may be not inaptly called neighborhood statesmanship.

I am convinced that the average neighborhood needs statesmanship quite as intensely as the large community known as the nation needs it. One reason why we have *national* statesmanship is because people have a fairly definite conception of national unity and of national interests. The average high-school pupil to-day learns more about national exports and imports than about the exports and imports from his own neighborhood. He knows more about crop areas and maximum and minimum production in the nation as a whole than he knows about his own community. People are therefore thinking about national prob-

lems and discussing them, and out of this knowledge, thought, and discussion grows national statesmanship. Let us by all means promote in every possible way the development also of *neighborhood* statesmanship. If every neighborhood develops something akin to statesmanship and really begins to take measures to promote its own prosperity, one might almost say that the prosperity of the nation as a whole would take care of itself, though, of course, there would still be need for national statesmanship. However, they who have been able to think clearly and plan wisely regarding the economic interests of the neighborhood, will furnish the very best material out of which to develop men who can think clearly and plan wisely regarding the larger national interests.

II. INTEGRATING COUNTRY LIFE

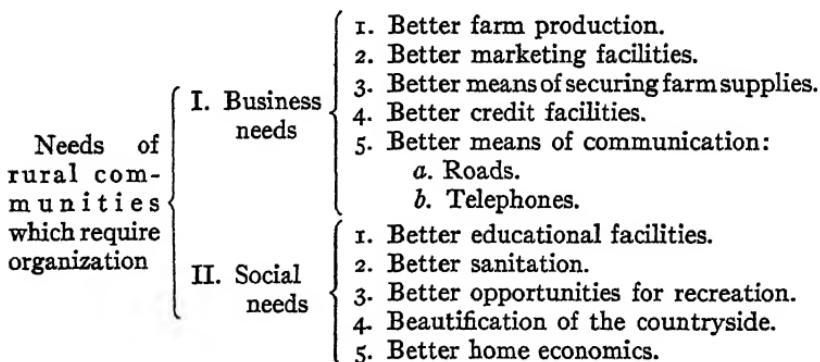
Organization of Rural Communities.—The writer has been actively interested for a number of years in promoting a better organization of rural interests. The more he studies the problem the more he is convinced that the effective organizations of these rural interests must begin with a definite neighborhood conscience. *He sees in the consolidated school the key to the whole situation*, provided, as suggested above, the boundaries of the school district coincide fairly closely with the boundaries of the unit of civil administration and of the economic unit as described above. After this has been achieved, the school may very well become a centre of the organization movement. One of the most striking things about the effective rural organization of Denmark as well as of Holland, Germany, Belgium, and Ireland, is the part which the school has played. There the local schoolmaster is usually the secretary of the farmers' co-operative association; and one reason why he can function so well in this capacity is that the school district is a real neighborhood and not merely a certain number of square miles of territory.



(From the *Year-Book* of the United States Department of Agriculture for 1915.)

It is not very difficult to convince farmers of the advantage of organization. There is probably not a farming community in the United States which does not need some form of organization. Much excellent work has been done by certain national associations, such as the Grange, the Farmers' Union, the Gleaners, the Society of Equity, etc. But the thing that still is lacking is *community* organization.

However, organization for its own sake is a very poor programme. Organization to supply certain definite needs is a very good programme. No two communities are likely to have precisely the same needs; therefore no two communities are likely to be served by precisely the same kind of an organization. A considerable study of the problem has convinced the writer that the following outline includes the principal needs of the average rural community:



Social Needs.—The business needs of the farmers have received somewhat more attention than the social needs, and yet it is probable that the social needs are quite as acute as the business needs. It was at one time believed that the one thing needful for the improvement of country life was to increase the income of the farmers. We are now beginning to discover that that is only half of the problem, and by no means the most difficult half. We find, for example, that the wealthy farmer is more likely to move to town than the

unprosperous farmer.] In fact, the wealthy farmer sometimes moves to town simply because he is wealthy—because he has accumulated a competence and is therefore able to afford the luxuries of city life. Those sections of the country where agriculture has been most prosperous, where land is highest in price, and where farmers have grown rich in the largest numbers, are the very sections from which they have retired to town with the greatest unanimity, and where there is in consequence the largest percentage of tenancy.

In some of these rich sections we find the schools and churches and other agencies as badly run down as in the poorest sections. In fact, if you want to find the best general social, educational, and economic conditions in the open country you should go, not to the regions where the soil is rich nor to the very poorest, but to sections where the land is just moderately productive. Here you will find *farmers who are moderately well-to-do but not rich enough to retire*. They stay on their farms and educate their children, and build up schools, churches, roads, and other things to make country life tolerable. In the very poorest sections of course they cannot afford these things. In the very richest sections the landowners are living in town and spending their money there, and spending just as little in their old neighborhoods as they possibly can.

The writer well remembers a certain school district in the heart of the corn belt as it was about forty years ago. He has recently been back to the same neighborhood. The schoolhouse is just as it was forty years ago. It has been kept in fair repair, but so far as improvements are concerned not ten dollars have been expended either on the building or on the grounds. The school-teachers get very little more in the way of salary than they got forty years ago, yet forty years ago the whole district could have been bought at \$25 an acre. Now there is scarcely an acre that could be bought for less than \$150, and the price runs from that up to \$200 an acre. It would seem as though the people were finan-

cially able to support a much better school. However, forty years ago but two farms in the district were farmed by tenants. Now more than three-fourths of them are so farmed. The owners are "living in town."

Where this situation exists we get into a vicious circle. Because the school is so poor farmers who care for the education of their children do not like to live there; they move to town as soon as they can afford it. Because they move to town the schools remain poor and inefficient, and so things go from bad to worse. Something must be done, apparently, to make it more worth while for well-to-do farmers who really care for good schools to remain in the country where they can support good schools. One difficulty with the school just described is that the district included but four square miles. The consolidated school, which would give the farm children some of the advantages which they get in a city graded school, would have gone a long way toward keeping some of those farmers on the land.

The Cityward Tendency.—If we were distressed to find that water was flowing from one lake into another, we should not think it a very wise plan to try to pump some of it back into the upper lake. That would only accelerate the flow downward again. We should try rather to prevent the flow downward. For a long time many people have been distressed to find that population is moving from the country districts to the cities and towns. It has occurred to some of them that the thing to do is to colonize city people in the country. This plan is just about as wise as that of pumping water back from the lower into the upper lake. It would only accelerate the movement cityward. It ought not to take a very wise man to see that it would be wiser to find out why the people are moving cityward and then, if possible, to remove the cause.

One reason undoubtedly is that, for some years at least, the rewards of labor have been higher in the cities than in the country. That which we now call the rising cost of

living is partly a movement toward an equilibrium; that is, toward a condition where the rewards of industry will be approximately as great in the country as in the city. When the farmers are enabled to get a little higher price still for their products we may expect that the equilibrium will be reached.

There is another reason, perhaps still more important, why country people move to the city. Some of the most prosperous of the country people do not find in the country the means of social, intellectual, and esthetic satisfaction, which their prosperity enables them to afford. They find them in somewhat greater measure in the towns and, since they can afford to do so, they retire from the farms to the towns. *This movement of prosperous people from the farms to the towns will never be stopped until the country offers as great attractions as the towns.* Until this is done, the faster farmers become prosperous enough to afford to retire to the towns, the faster they will retire.

Another reason why country people move to cities is that some of them have not been trained to see and appreciate the real satisfaction which country life affords. People who think that an electric sign is more beautiful than a sunset, that shop-windows are more beautiful than grass and trees and flowers, that crowded streets are more beautiful than open fields, that one of our modern plays, most of which are written by men who mistake neurosis for mentality, is more beautiful than an outdoor pageant, will probably continue to go to the cities. Well, the country will perhaps be well rid of them. But the desire for change and variety of experience in a lifetime will always remain a big factor as long as town and country are so unlike in so many ways.

There are two things above all others which need to be done. The rewards of labor, abstinence, and enterprise in the country must be still further increased, and more of the adornments and embellishments of life must be made avail-

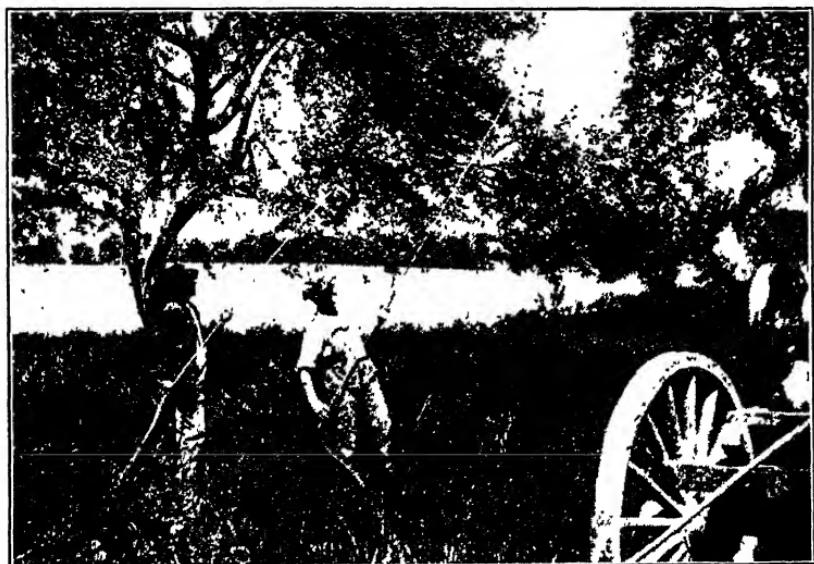
able for country people. In order to increase the farmers' income we must spread scientific information more effectively, we must have better methods of marketing, of purchasing farm supplies, and of financing the farmers' business enterprises. In order to increase the adornments and embellishments of life in the country, we must have better schools, better sanitation, better recreation, and more general beautification of the countryside. These are all essential parts of a constructive rural programme. Every item in that programme calls for organization.

The School at the Centre.—The key to most of the educational problems of the country is the country school. There is scarcely a single phase of country life in which the country school may not become a vitalizing factor. The boys' and girls' clubs should begin there. The study of farm production, of marketing, of sources of supply, of farm accounts, and of road and telephone construction should be a part of the work of the country school. But this work should be extended over the social interests of the community also. The knowledge of one's environment should include one's economic and social as well as one's physical environment. The first attention of the committee on education should obviously be directed toward the country schools.

There should be a distinct and persistent movement to make the country schools at least as efficient as the city schools. To accomplish this the entire school system of the State must eventually be supported and administered as a unit, as the school system of a city is now. That one section of a city is less wealthy than another is not considered a valid reason why the children of the poorer section should have poorer schools than those of the richer section. This policy should be made to apply to the entire State. That there is less wealth in the country than in the city ought not to be considered a valid reason why the country children should have poorer schools than the city children. They



Learning how to prune an orchard



Reproduced by courtesy of Division of Agricultural Instruction, U. S. Dept. of Agriculture

An orchard project. Renovation of an old orchard by high-school boys in Maryland

should all have equal support out of the tax fund of the entire State, and they should all be administered as a unit. If each ward of the city were restricted to the taxes of that ward for school purposes, it would often happen that the most populous wards, where there were the most children needing schools, would have the least money to support their schools, because of the scarcity of taxable property, while the least populous wards, where children were scarce-est, would have the most money for schools, because of the large amounts of taxable property. This would be so obviously wasteful and inefficient that no enlightened city would tolerate it. Yet that is precisely what happens in all of our States. Schools are supported, not in proportion to the need for them, which is the only correct principle, but mainly in proportion to the amount which each community can raise.

In order that the State school system may be administered as a unit there must be at the head of the State system a highly trained expert, not elected, but appointed as is the superintendent of a city-school system. He should have ample power and an adequate staff of assistants and inspectors to enable him actually to inspect the schools of every county in the State.

Again, in each county there should be an educator, not elected as most county superintendents are now, but appointed by a board of education as are city superintendents, with ample power and a staff of assistants which will enable him to inspect and control every school in the county. Again, the county should be redistricted so that every school district shall be large enough to support a first-rate school which shall compare favorably with the schools of the cities and the larger towns. The boundaries of this district should, as stated above, coincide so far as possible with those of the unit of civil administration and also, so far as they can be determined, with those of an economic unit.

Until these things can be brought about through State

legislation each community can do a great deal toward the improvement of its own schools through concerted action. The study of the broader questions of national economy may well be turned over to the higher institutions of learning, where students are more mature than they who attend the district school. But the questions of local or neighborhood economy, with which the study of economics ought always to begin, may be studied to advantage in every country school.

But the country school cannot possibly do everything in the way of education that is needed. At any rate, there are some things which one can learn better outside of school than within. The committee should learn how to utilize other educational resources, such as study clubs, natural-history clubs, circulating libraries, not entirely of cheap fiction, but in part at least of solid reading which will be of economic use to the community, and so on. Use should also be made of such educational agencies as the stereopticon and motion-picture outfits, and lecturers from the state colleges and other higher institutions.

III. IDEALIZING AND REALIZING RURAL VALUES

The moral advantages of a closer neighborhood organization and a more definite neighborhood conscience are almost as important as the economic advantages. That man is a political animal, we have on the authority of Aristotle. As he used the expression, political animal meant precisely the same as social animal. Recent psychologists have given a new support to this doctrine by showing that the individual never reaches his normal development except in a social organization. Isolation and lack of definite correlation among individuals produce moral reactions of the most lamentable nature. The individual comes in much closer contact with his neighborhood than with his state or his nation. His moral reactions are more largely determined

by the type of neighborhood organization than by the type of state or national organization.

¹ They who cannot or will not work together are the natural and, one might almost say, the legitimate prey of those who can. Whether we like it or not, it is a law of life, a part of the economy of nature. There is no use kicking against it; the only thing to do is to conform to it. Unless we can manage to work together with our fellows we must expect to be preyed upon, governed, or exploited by those who can.

No people ever succeed in governing themselves until they are able to work together. Until they learn that, they will be governed by some one else, either an outside power which subjugates them, a ruling class within their own members, or a boss. So long as they quarrel among themselves or work at cross purposes, others who have learned the art of working together will rule and exploit them.

It is as true in business as in government that the people who work together will rule or exploit those who work at cross purposes. That is one thing which ails the farmer at the present time. It is not necessarily true that farmers are more cantankerous than other people, though it sometimes seems so. But there are so many of them, they are so widely scattered, and they are so much more expert in dealing with the forces of nature than with the forces of society, that it is physically more difficult for them to work together than it is for other classes. However, these natural obstacles in the way of united effort must be overcome by a greater wisdom and moral discipline than other classes possess, otherwise the farmer will always be at a disadvantage. That is what wisdom and moral qualities are for—to overcome difficulties.

Now we need not waste any sympathy on those who will not or cannot work together. They get what they deserve. Of course we all have our own opinions as to what a good man or a bad man is like. We generally call him a good man who possesses the qualities which we admire, which is very likely to mean the qualities which we think that we ourselves possess. Looked at broadly and impersonally, however, the essential difference between good men and bad men is that the former are very careful of their own obligations and other people's rights, whereas the latter are very particular about their own rights and other people's obligations. Every great moral teacher has tried to make men good by telling them of their obliga-

¹ The substance of the next few paragraphs was published in the *Agricultural Student* in October, 1913.

tions and not of their rights. We are naturally so much inclined the other way that this is necessary in order to restore a proper equilibrium.

Now it is rather obvious, is it not, that people who are careful of their own obligations and other people's rights are easy to get along with. A community made up of such people can always work together. On the other hand, people who are very particular about their own rights and other people's obligations are hard to get along with. A community made up of such people cannot work together at all. In our impatience we are sometimes tempted to say that such people have no rights and deserve to be exploited. However, the question becomes complicated when we have a community made up in part of people who would like to work with their neighbors and in part of people who will not.

The foregoing is presented here to show how closely the problem of organizing rural interests is bound up with the question of religion and morals. Unless the right moral influences are at work creating the spirit of working together and mutual helpfulness, no effective organization will be possible. The church, the school, the religious press, and every other moral agency must begin at the bottom by teaching people to be careful of their own obligations and of the rights of others, and overcome the tendency to be insistent upon our own rights and other people's obligations.

City Life vs. Country Life.¹—Our branch of the human race has not yet demonstrated its ability to live in cities. We have been a pioneering race for something like two thousand years, and no one knows how much longer. It is probably harder for a race to change the habits of its lifetime than it is for an individual. This habit has made us an outdoor race, whose chief characteristic is strenuous muscularity. Such a race degenerates rapidly whenever it attempts to live an indoor life of bodily ease and luxury. It is always at its best when it is pioneering—when it is obeying the first command written in its sacred book: "Be fruitful, and multiply, and replenish the earth, and subdue it: and have dominion over the fish of the sea, and over the fowl of the air, and over every living thing that moveth upon the earth."

We have all heard stories of the children of certain families who

¹ The substance of the next few paragraphs was published in the *Delineator*, June 8, 1914.

hang around home waiting for the patrimony and then quarrel over its distribution. Over against despicable examples of this kind we have the more robust and inspiring examples of those children who go out into the world and create families and patrimonies of their own instead of quarrelling over their share of the estate. When a race ceases to be a pioneering race, that is, when, instead of going out to find new opportunities, the children of the race hang around the older centres of civilization waiting for the accumulated riches of the past generations, they generally fall to quarrelling over their distribution. This is even more despicable than for the children of a family to wait for their patrimony, and it is a more certain mark of degeneration.

Much of that which goes under the euphonious name of social reform is merely a symptom of this kind of degeneration. Its home is in the cities, it springs from urbanized minds, and its prophets are mainly members of urbanized races. Strong, robust, self-disciplined, individualistic men are never exploited. If they do not like their treatment in one place, they go where there is land, where they can be independent. Weak, whimsical, timid, gregarious men, who are afraid to get very far from the herd, are always exploited. They cannot even be truly organized. They can be herded together as mobs, browbeaten by their own leaders, excited to spasmodic group action, but so far as constructive, consistent, united action is concerned, it is beyond their power. Only self-disciplined men, capable of controlling their impulses, willing to suffer loss for a principle, but capable of working together with their fellows for distant ends, either with or without leaders, are capable of genuine organization. Such men cannot be exploited.

Another symptom of the degeneration which comes to our race from city life is "class consciousness." Once upon a time there was an important dialogue between a man from the city and a man from the country. Please remember the important fact, commonly overlooked, that the one *was* from the city and the other *was* from the country. The man from the city asked: "Who is my neighbor?" Such a question would not occur to a real countryman. He has no doubt as to who his neighbors are. But a man from the city does not always know. He is inclined to consider whether they are members of the same occupation, profession, or religion as himself, or whether they are people with about the same income who can entertain on about the same scale as himself, or whether they are the people who live within easy reach.

The man from the country who answered this question by telling the story of the good Samaritan was in the habit of emphasizing the

fundamental relations of life. The geometrical relations are very much more fundamental than are the class relations. In fact, all class consciousness, such as was shown by the priest and the Levite, is contrary to the scheme of life and social relations which this man from the country came to establish. The wisest social workers even in our cities are beginning to realize that the neighborhood must be the basis of a genuine reconstruction of *city* life.

Broadening the idea of neighborhood we have the principle of territoriality as the basis of nationality. Enlarge the neighborhood sufficiently and we have the territorial group called the State. Several times in the history of the race other groups than the territorial group, other organizations than the territorial State, have claimed the loyalty of the individual. Whenever the average citizen is more loyal to another group, say a church, a party, a labor organization, than to the State, the State has disappeared. That is to say, when he will obey the orders of some other organization rather than the law of the land, the territorial State has already been subverted. Needless to say, these other groups, based on a common religion, or a common occupation, which sometimes stand as rivals for the loyalty of the people against the group, commonly called the State, which is based on the occupation of the same territory, have their origin in cities. Indoor people are the only ones who can easily forget the principle of territoriality and the law of the *land*.

Pioneering in this country needs redirection. During the past decade it has taken thousands of our most valuable citizens beyond our own borders to enrich the life and increase the power of other nations. In place of these sturdy, self-reliant, courageous citizens, who are willing to face hardship, and capable of creating their own opportunities, we are receiving in vast numbers men who prefer to go where opportunities have already been created for them by pioneering activities of others, to fill positions created for them by the business enterprise of a sturdier race. In other words, we are losing men who can *create* opportunities and are receiving men who are only capable of *filling* opportunities created by others. This means that we are in process of becoming an urbanized, and therefore a degenerate, nation.

The difficulty is not, as some seem to think, that we do not distribute our immigrants. They probably do better to stay in the cities because they would be useless on our farms. Our farmers would not hire many of them, and they have not the qualities which make pioneer farmers. Besides, if we could send more of them to the country and keep them there it would only accelerate the movement toward Canada and the cities. The stream of population is moving

away from our farm regions. It is much more important that we retard the flow of that stream than that we try to turn a new stream toward the farms.

While so many thousands of our farmers are emigrating beyond our boundaries in search of more land, it has been ascertained that not more than forty per cent of our tillable area is actually under tillage, and of this not more than fifteen per cent is actually yielding satisfactory returns. If the untilled sixty per cent were all poor land, while better land could be had for the asking just over the boundary, it would be difficult to convince many of these farmers that they ought to stay at home and cultivate this poor land. But there are reasons for believing that this is not generally the case. The lands which they are seeking abroad have two characteristics which fit them for isolated and individual farming. The soils are new and fertile and therefore require no investment to bring them to a high state of productivity. Again, they are suitable for the growing of a staple crop—wheat—for which there is a ready sale in a highly organized market. Thus the marketing of this product takes care of itself.

Much of the land still untilled in this country is capable of a high degree of productivity, but will require some investment of capital to bring it to that state. The problem of financing the farmer during this period of waiting must be solved. Again, much of this land is suitable for mixed crops and agricultural specialties rather than for one or two great staple crops. The products of this kind of farming do not market themselves. It requires organized effort on the part of the farmers; therefore the problem of marketing must be solved before these lands will attract farmers and keep them from going abroad. Here is a new kind of pioneering which challenges the young men and women of our race.

The Young Women.—The challenge is even more to the young women than to the young men. They will have the harder half of the burden and they will find less to attract them. Most young men are attracted by an outdoor life, and even physical hardships do not deter them, if there is a chance for real achievement, together with genuine comradeship. That is what a soldier's life involves. But none would want to be a soldier if he were deprived of comradeship and if there was no chance of achievement. Young women are not so strongly attracted to this kind of life. Nothing but religion will sustain them in it, and unfortu-

nately women are, contrary to the common belief, far less religious than men. The reason for this common error is that what we commonly call religion is of a namby-pamby sort. There is little in it to sustain the spirit of a crusader, which is characteristic of any genuine religion, at least, the only kind which appeals to men.

To conquer our untilled lands, to subjugate them, and force them to yield food for a great people, to build great families with high ideals in order that we may become a great people worthy of being fed, is a task which ought to fire the ardor of our young American crusaders as no old crusader's zeal was ever fired. It is a vastly greater task and vastly more worthy of accomplishment than any which the old crusader faced.

We have therefore the opportunity for great achievement. Can we give the young men and women also the comradeship which is, next to the opportunity for achievement, the most important factor in sweetening the outdoor life of hardship to which we are calling them? They must go in groups and colonies. We need a revival and readaptation of the old New England method of settlement by colonies. Sometimes a preacher would gather a congregation around himself and lead them out into the wilderness and build up a little colony around his church. We no longer have a wilderness where free land can be had, but with less hardship a colony could now be started on land which would have to be purchased. It would be necessary for the colony as a whole to work out the problem of credit and farm finance. An organized rural life, whether it be of the old New England type or of some other type, will be necessary to give the sense of comradeship in this great rural crusade.

But what has this crusade to offer to the young men and women of America? From the standpoint of a pig-trough philosophy of life it has nothing to offer. They who prefer the flesh-pots of Egypt would better stay in Egypt. Indoor work, freedom from responsibility, short hours, time



Animal-husbandry study at first-hand



Pupils studying tree grafting at Sherrard, West Virginia

for carousal in rooms full of lurid oratory, beer, and tobacco, will never be the lot of those who enlist for this productive campaign. But from the standpoint of the creative philosophy of life it has the best things in the world to offer.

"To young men it offers days of toil and nights of study. It offers frugal fare and plain clothes. It offers lean bodies, hard muscles, horny hands, or furrowed brows. It offers wholesome recreation to the extent necessary to maintain the highest efficiency. It offers the burdens of bringing up families and training them in the productive life. It offers the obligation of using all wealth as tools and not as a means of self-gratification. It does not offer the insult of a life of ease, or esthetic enjoyment, or graceful consumption, or emotional ecstasy. It offers, instead, the joy of productive achievement and of noble comradeship in the productive life.

"To young women also it offers toil, study, frugal fare, and plain clothes, such as befit those who are honored with a great and difficult task. It offers also the pains, the burdens, and responsibilities of motherhood. It offers also the obligation of perpetuating in succeeding generations the principles of the productive life made manifest in themselves. It does not offer the insult of a life of pride and vanity. It offers the joy of achievement, of self-expression, not alone in dead marble and canvas but also in the plastic lives of children, to be shaped and moulded into those ideal forms of mind and heart which their dreams have pictured. To them also it opens up the joy of productive achievement and the noble comradeship of the productive life."

This does not mean that there are no possibilities of material reward in the new type of agriculture to which young men and women are called. During the last two generations, owing to the rapid opening of the Western lands, agriculture has been so depressed that many farmers have felt discouraged. They have seemed to be pouring their lives into a soil which drank it up and gave little in re-

which field the problem of economic production is perhaps greater than that of efficient marketing. The reason for this is that there is a well-organized market for staple crops and the problem of marketing is therefore somewhat less difficult than in the case of agricultural specialties. But even in the growing of staple crops the small farmer will have a hard time of it if he is forced to compete with the big farm when it is cultivated by gangs of cheap laborers. The two worst enemies of the small farmer are the opponents of co-operative buying and selling, on the one hand, and the advocates of enlarged immigration to the rural districts, on the other. The latter would help the big farmer in the buying of labor for his farm, and reduce the price of the small farmer's own labor when he undertook to sell it in the form of products.

Organization must be the watchword of the small farmer in the immediate future. He is the one remaining person in our industrial civilization who both works with his hands and is self-directed. He is the only laborer who, in large numbers, is his own boss. It is our deliberate opinion that the real strength of the republic depends upon him more than upon any other one class. But he will disappear unless the living conditions of the country are made attractive to men who are capable of self-direction. If they are not, every man who is capable of self-direction will leave the country to be tilled by men who can only work under the direction of a superior.

Consolidation.—The key to this situation is the neighborhood, or the rural community. The key to the neighborhood is the rural school as a community centre. But the rural school cannot possibly function as a community centre unless there is a community, and unless this school is at, or near, the centre. To have several isolated district schools scattered about over what is really the community, no one of them being by any chance at the natural centre of anything, hinders this work of community building and this makes impossible the building of a genuine rural civilization.

PROBLEMS IN APPLICATION

1. From your study of these two chapters make a list of the social conditions necessary or desirable for school consolidation.
2. What light do these two chapters throw on methods of promoting consolidation?
3. In what kinds of communities would consolidation proposed by school officials be apt to fail?
4. What has the Y. M. C. A., the Y. W. C. A., the Red Cross, the Grange, or other similar organization done to promote community enlargement and "getting together"?
5. How can the county newspapers and farm journals be used to show the people what consolidated schools are doing and could do?
6. In what ways could an organization of young men and women, teachers, parents, merchants, and professional men promote community co-operation?
7. Why is it sometimes desirable to start recreational and trade co-operation in such form as community motion-picture shows and creameries before consolidation of schools is attempted?
8. What literature could you procure to place in the hands of intelligent farmers that would inform community leaders on consolidation?
9. Why is it desirable to have farmers themselves initiate consolidation rather than have it started by the teacher, preacher, physician, county agent, or other such individual or group?
10. With what opinions in the two previous chapters do you disagree?

BIBLIOGRAPHY

1. Wilson—"Evolution of the Country Community." Pilgrim Press, Boston.
2. Carver—"Principles of Rural Economics." Macmillan.
3. Rapeer—"Educational Hygiene," chaps. V and VI, on co-operation. Scribner.
4. Plunkett—"The Rural Life Problem of the United States." Macmillan.
5. Fiske—"The Challenge of the Country." Association Press, New York.
6. Bailey—"The Country Life Movement." Macmillan.
7. Anderson—"The Country Town." Baker and Taylor.
8. Report of the Country Life Commission. Government Printing Office, Washington, D. C.

9. Butterfield—"The Country Church and the Rural Problem." University of Chicago Press.
10. Quick—"The Brown Mouse." Bobbs, Merrill Co.
11. ____—"The Fairview Idea." Bobbs, Merrill Co.
12. Hayes—"An Introduction to Sociology." Appleton.
13. Wilson—"The Church at the Centre." Missionary Education Movement, New York.
14. Coulter—"Co-operation Among Farmers." Sturgis and Walton.
15. Rural Surveys in Various States, by the Board of Home Missions, 156 Fifth Avenue, New York.
16. Monahan—"Consolidation of Rural Schools and Transportation at Public Expense." Bulletin of the U. S. Bureau of Education.

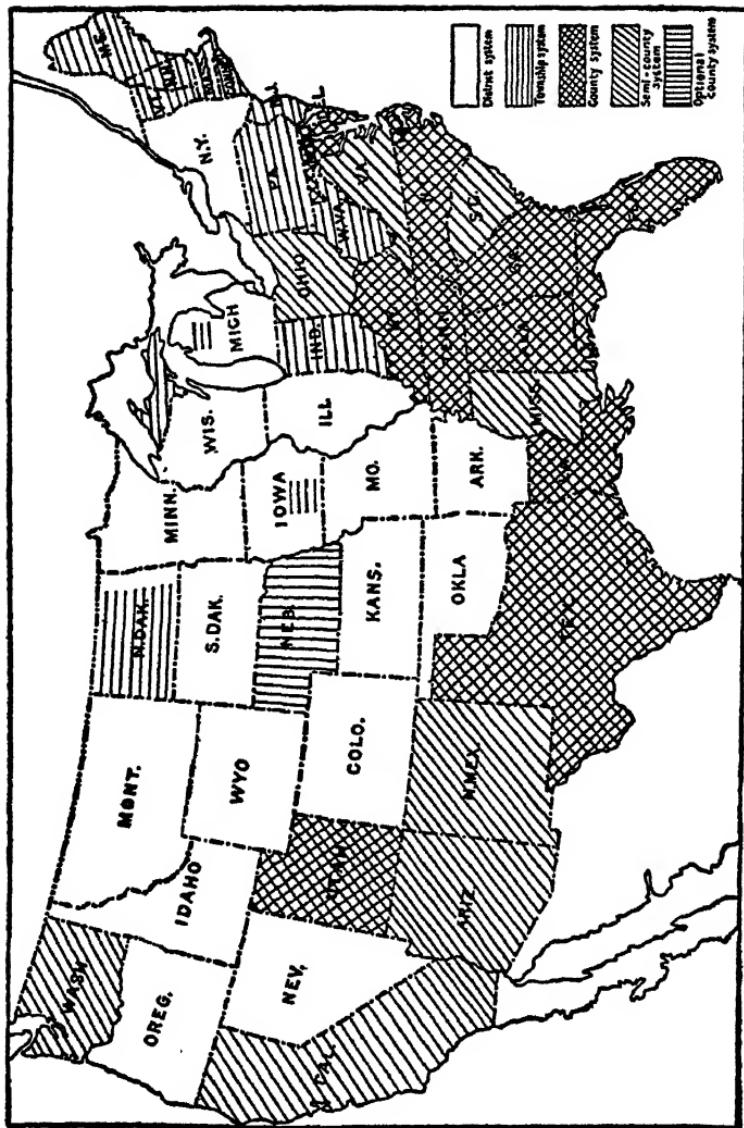
CHAPTER V

SCHOOL ADMINISTRATION AND CONSOLIDATION

PRELIMINARY PROBLEMS

1. Reread the concluding section of Chapter I and note the principles of rural-school administration held by prominent educators.
2. What administrative proposals are made in Chapter II?
3. Why was the district unit of school control natural and desirable in pioneer times before State responsibility for education had very much developed?
4. Describe the form of administrative control in Utah and Ohio. (See Foght's "The Rural Teacher and His Work," p. 130.)
5. What States still have the district system, the county system, the township, town, or mixed system? (See map on next page.)
6. What States have the most consolidated schools? What form of administration do these States have?
7. What recent contributions have been made on a large scale to school support and encouragement of progress?
8. What are the objections to a small county board of education instead of three "directors" for each little school and teacher?
9. How can democracy and efficiency best be harmonized in this matter?
10. What power have your State and county officers in promoting consolidation beyond "agitation" and publicity?

Problems of Small Systems.—Superior men and women may be able to get along fairly well even though they live in poor, tumble-down houses and outgrown forms of governmental control, but the average run of people are undoubtedly greatly helped in their growth by favorable environmental conditions. Progressive communities in country districts may obtain good schools, including consolidation, under any form of educational administration, but the evidence goes to show that improving the general organization



This map shows graphically the different units of school organization in use throughout the country. The county unit, in one form or another, is making steady headway. (From Foght.)

and administration of the schools decidedly raises the general educational level.

It is possible administratively for the State school code to make it necessary for the State superintendent or commissioner to hand out the State appropriations, for example, in such a way as almost to demoralize the schools, and then again it may insure such an apportionment of the funds as will stimulate the best efforts of communities along the best lines. Giving out school money on the basis of the number of children living in districts, regardless of whether they attend school or not, fails to stimulate attendance. Giving it out partly (say, one-third) on the basis of the total aggregate number of days attended by all pupils stimulates school communities to get their children to school every day in the school year. Giving it out partly on the basis of the number of teachers employed (say, another third or more) frequently stimulates school directors to add another teacher for an overcrowded school. Reserving some of the fund to encourage good movements, like consolidation, helps greatly to bring it about, especially where the fund, as in Minnesota and some other States, is large.

Where each separate school in the country is managed by a board of school directors (the district system) we have a plan of administration that encourages the habit of thinking of each separate school unit as an isolated thing, whereas if the board of directors had charge of ten to a thousand schools they could more readily consider bringing little weak schools together at one centre with or without transportation.

I. CITY EXPERIMENTATION AND ITS LESSONS

City Experimentation in Administration.—We need hardly explain and illustrate the principle that the form of administration we use for a State or county greatly modifies the development of good schools. The principle has been

amply demonstrated for many years. In the last few decades, in fact since the industrial revolution has built up the city mode of living, administrative progress has been very great in these new and congested centres. In Germany and England the progress has in many ways been greater than in our own country, although we have done a tremendous amount of costly administrative experimentation. From the most decentralized local or ward political control the people have been driven by hard experience to adopt one after another of the administrative measures which in business and in European cities have brought more efficient and honest government.

Cities, starting as small towns with perhaps a single school board for a single school, have grown rapidly into large municipalities with thousands or hundreds of thousands of inhabitants. Each new accession to the city in the form of a ward or a school has had its representative board of directors. Frequently there have been as many or more directors than teachers, even as in rural districts in many States there are three times as many able-bodied men as directors and managers as there are teachers. Board members have multiplied in many cities until over a hundred members have tried to manage the schools at one time; the city territory has in some cases spread over an entire county.

Too Many Cooks Spoil the Broth.—The results almost inevitably have been in city after city the ruination of the schools and wide-spread failure to furnish education of the right kinds and where it was most needed. Where the different local members have met as a central board the situation has been little improved over the purely local system if at all. Members have got into each other's way; the board meeting-room has been turned into an oratorical hall in which to play to the galleries, talk for the newspapers, and to do business so formally, or with so many committees, that much business was lost in the red tape; members have

fought and "log-rolled" for their respective localities, frequently getting schools built where they were not needed in order to boost land values or their own prestige while other schools in the city were overcrowded and on part time; teachers have been employed because they had friends on the board rather than for teaching efficiency; politics have ruled to such an extent that the best men would not become members of such an organization; in general, there has been a great lack of that business efficiency which American business men of the best type have been evolving in their great industries for a half century.

We need not stop to give particular illustrations of the inefficiency of such a system. As the needs for real schooling became more manifest and the expenses of the schools grew until they became a burden, cities began to call for efficiency in public-school administration, and they have obtained it chiefly by centralizing control: lessening the number of directors, getting them elected or appointed at large, from any part of the city, arranging for them to limit themselves to legislative work and hiring executives to do the work of superintending and supervising schools and carrying on the business end of the work. Boards were reduced from as high as one hundred and forty-six members to five, and three members on a large city board with hundreds of teachers to-day is not uncommon. Now we can get some of the best men of the city to serve without pay; they can meet around a table in a small room with a few chairs about for auditors, and can despatch legislative work as it is done in the best business concerns of the day. In some cases, as in New York City, the local boards have been kept as school visitors and advisers of the principals and central board. The people have not felt with time that they have lost any democratic privileges or responsibilities which they should bear. The schools have prospered as never before, and a new era in school administration in cities has taken place. The recent surveys have helped greatly

in facilitating these changes in many cities that had not whole-heartedly gone over to the new system.

Centralization in the Country.—Another reason for the greater centralization has been the increase of population. When people were scattered about over the land and schools were separate and isolated from one another, the thought of handling several of them as a group did not rise. Still another reason has been the relative decrease in the size of the country with the invention of all the many new means of bringing people together and into closer communication. It was harder to travel over one district or township in the early days than it is in most cases to travel over a whole county or very large city now. Telephones, telegraphs, railroads, trolley-cars, automobiles, increasingly better roads, free mail and parcel-post delivery at our doors in city or country, better wagons for transportation of numbers of persons, such as the coal-heated busses and the exhaust-heated autos, have all worked together to banish isolation and to bring great numbers of people over large areas into quite close and intimate touch with each other. The world as a great human brotherhood is rapidly approaching, even by the aid of terrible wars. But "co-operation is becoming more than a belligerent virtue." The administration of all the schools in large areas, hundreds of square miles in extent, is as inevitable as has been the integration of administration in cities.

II. THE THREE SYSTEMS OF CONTROL

The district system with its purely local control was fairly satisfactory for pioneer life. With the growth of population and modern improvements and inventions it must give way to more efficient forms. Cubberley summarizes some of the chief faults of the district system as follows:

The chief objections to the district system of school organization are that it is no longer so well adapted to meet present conditions and

needs as are other systems of larger scope; that the district authorities but seldom see the real needs of their schools or the possibilities of rural education; that as a system of school administration it is expensive, short-sighted, inefficient, inconsistent, and unprogressive; that it leads to great and unnecessary inequalities in schools, terms, educational advantages, and to an unwise multiplication of schools; that the taxing unit is too small, and the trustees too penurious; that trustees because they hold the purse-strings, frequently assume authority over many matters which they are not competent to manage; and that most of the progress in rural-school improvement has been made without the support and often against the opposition of the trustees and of the people they represent. . . . This large number of school officers stands to-day as one of the most serious blocks in the way of progressive educational action.¹

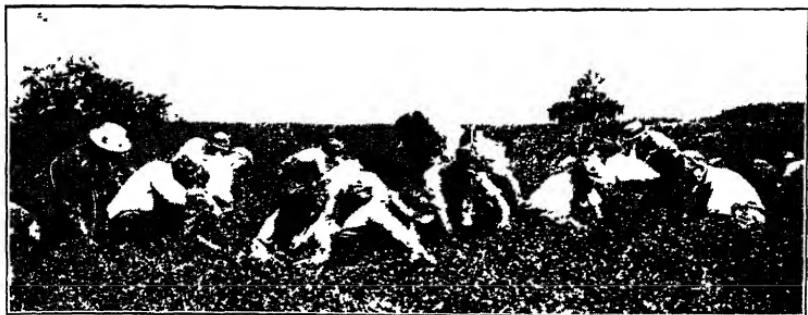
The district system is doomed in American schools. In the last few years many States have tried to make the change over to the township or county system and a large number have succeeded, especially in getting the county unit. Consolidation cannot flourish under the district system. It takes outside agencies to get the various school directors, usually three to each little one-room school, together and to agree. Indiana with the township system and with hundreds of consolidated schools and Illinois just across the line with the district system and very few illustrate the point. New York has recently advanced to the township stage, and then unfortunately receded to the inefficient district system, but not for long. Under such a system the county superintendent is politically elected and has little real influence or power to educate directors up to an appreciation of the value of a change. If he has unusual power, his directors are too many and too changing for him to meet and influence during his brief tenure of office.

In making the change over to the larger unit of administration there is sometimes expressed the natural fear that there will be less democracy, less interest in and control over the schools by the people. The answer is that the pres-

¹ "Rural Life and Education," p. 184.

ent interest in schools in the district or even in the township could hardly be worse than it is, and that it certainly is little greater than if the county were the unit. Furthermore, democracy and interest do not depend greatly upon the piecemeal character of the control and participation. The schools are still to be managed for the people, by the people, and of the people. Their control over their representatives for an entire township or county is not less and frequently far more than of the individuals of the little school community, and they are able to demand and obtain far superior schools in the main. There are manifold opportunities to share in the life and teaching of the school if the people will participate in the many ways possible aside from direct management. While there are possibly some dangers for the remote future of democracy in centralization over a larger area, yet we feel that it is desirable to take this one step which appears clearly necessary and rest assured that democracy will meet the larger problem. If democracy means a wider sharing of common interests and activities, then a county system with a series of consolidated schools directed by real leaders and with means at hand for getting the people together to share in a larger and richer community and county life may easily give farmers more real democracy than the hundreds of little individualistic and isolated schools without leadership and agencies for bringing the people together.

The township system has several advantages. In the East it is called the town system. In Indiana a single school trustee manages the schools of the township, such as are not separate districts under separate boards within the township. In Pennsylvania each township outside of incorporated boroughs with their own boards and superintendents or supervising principals has a board of school directors elected for six-year terms. In Massachusetts the town is not bounded by straight longitudinal and latitudinal lines drawn without reference to natural features, such



Studying alfalfa at first-hand

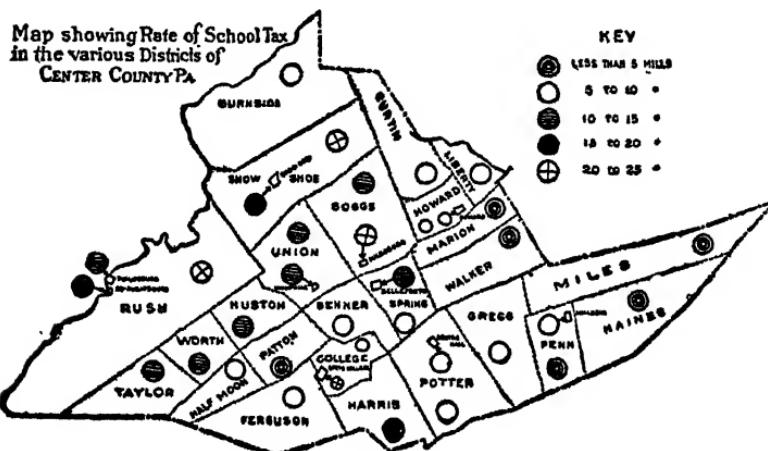


Learning to judge cattle in club work



A home project with seed corn

as streams and mountains, but is the country about one or several small villages or even rather large cities. These villages and cities are not independent, but are taxed for the country schools, and all share alike. Investigations of the best and most equitable apportionment of school taxes and responsibilities of public education show that this is more



just than the system where the village or larger place is separate entirely in taxation. Education is a kind of commodity that does not stay put. If you pay taxes for a fire department, street-lighting, or anything of the kind, you get what you pay for and it remains in your town thereafter. When a community pays for the schooling of a child he frequently, and we might say usually in America, does not remain to live and work where he obtained his schooling.

We are a migratory people. The country and the village community frequently suffer most since they educate pupils who later go to the cities. The cities have more property belonging to the entire State economically to tax and thus get large sums of money by a low millage. The maximum limit for cities of the first class may be six mills, while for rural communities it is twenty-five mills. Even then the

rural district frequently cannot get enough money for good schools. The city makes a smaller relative sacrifice for schooling and yet it gets free of cost the product of several years' school of the country and small town. The drift is practically all cityward. These and many other considerations, such as the fact that schools are not, like most public utilities, local affairs but are strictly State institutions, getting their rights and powers from the State as a whole, lead to an appreciation of the town system of New England which taxes all and unites all of a natural community with farms and central towns and stores and makes all share alike in educating, or at least schooling, the children. The value of such an organization has been well brought out by Professors Wilson and Carver in preceding chapters.

Yet even such natural districts may be too small or may fail to fit a scientific plan of consolidation over a wide territory. The best plan for the development of consolidation is to have thorough surveys of areas at least as large as counties, which of course vary very greatly in size, and then plan very carefully for future consolidation, where it is desirable, plotting desirable transportation routes and indicating the location of the consolidated-school plants. Where the township has not followed natural lines, such as rivers, mountain ranges, and the outlines of the community trading at one centre, as in a great part of the West where townships are bounded by six-mile sides regardless of physiographical or social conditions, the limitations of this unit of administration become clearly apparent. While the township is better than the district system, it is not big enough for the new consolidation and concentration taking place. In most States the governmental unit is the county, and the tendency is strong for all to use the same unit. There is no good reason for keeping the schools on a smaller, narrower base than the general government, and we prophesy that States with township systems will have either to establish the county system or make many changes to pro-

cure the advantages of the larger unit and escape the disadvantages of the smaller.

The County Unit.—A strong State control of education is everywhere necessary. The whole educational system is the child of the State, not of the federal government nor of the local community, district, township, or county. We have our State school laws, and these supersede all others. For administrative efficiency the governmental work of the State is divided into counties. In the county the most important and expensive activity is that of public education. It has the largest force of government workers in the form of teachers, and we may naturally expect in every State the county, large or small, to administer all the schools as a unit. There is opposition to these larger units by those whose taxes will be raised, or who fear they will be raised, by those who oppose any change, and by those who will lose some of their official powers. The county system permits of a small county board of education, instead of many boards, from which we could expect broad-minded views and administration of consolidation. It permits of a county superintendent free from party politics appointed by the board from among the educators of the State or nation, and from him we could expect efficient leadership in consolidation. It would make possible taxation of the entire county for the schools of the entire county, and obliterate some of the great inequalities of opportunity offered in poor and rich districts or districts happening to be traversed by railroads or containing mines to be taxed. Cubberley has well expressed the general plan of county school administration in his various books, and since not only State aid and improved State apportionment of school funds but the county unit are desirable for the best development of rural education through the consolidated school, we beg here to set forth his general plan:

III. PLAN OF COUNTY ADMINISTRATION DESIRABLE FOR CONSOLIDATION

Details of a County-Unit Plan.—Good principles of educational organization and administration would indicate approximately the following as a desirable form for county educational reorganization:

I. General Control.¹

1. The consolidation, for purposes of administration, of all schools in a county, outside of cities having city superintendents of schools, into one county school district.
2. The election of a county board of education of five representative citizens, from the county at large and for five-year terms, the first board however to so classify themselves that the term of one shall expire each year thereafter. This board to occupy for the schools of the county approximately the same position as a city board of education does for a city.
3. Each county board of education to seek out and elect a well-trained professional expert to act as a county superintendent of schools, and to fix his salary. Such officer to enjoy approximately the same tenure, rights, and privileges as a city superintendent of schools, and to have somewhat analogous administrative and supervisory duties and responsibilities.
4. Each county board of education to hold title to all school property, outside of separately organized city school districts, with power to purchase, sell, build, repair, and insure school property.
5. Each county board of education to act also as the board of control for any county high schools, county vocational schools, county agricultural high schools, and the county library, and to have power to order established such types of special schools as may seem necessary or desirable.

¹ In chap. X of Cubberley's "Rural Life and Education," drawings showing a number of counties before and after reorganization are given also; while in Appendix D of his "State and County Educational Reorganization," a county containing a city, five towns, and one hundred and three rural districts is shown in one drawing, and in another as reorganized into one city school district and one county-unit school district, the latter subdivided into fourteen attendance subdistricts, with a graded consolidated school and a partial or complete high school attached in each. Full statistics as to teachers, costs, and tax rates for this county are also given.

6. Each county board of education to be directed to order a careful educational and social survey of its county, and upon the basis of such to proceed to reorganize the school system of the county by abolishing all unnecessary small schools, substituting therefor a few centrally located and graded consolidated schools, with partial or complete high schools attached, and to transport children to and from these central schools. Each such school and its tributary territory to be known as an attendance subdistrict, the bounds of which may be changed from time to time as in the case of city attendance lines.

7. Each county board of education to have power to appoint, either alone or in co-operation with a city school district, or some adjoining county school district, a school health officer, a school attendance officer, and such other special officers or supervisors as the educational needs of the county school district may seem to require, and to establish or join in the establishment of special type schools.

II. Educational Control.

1. Each county school district to be managed as an educational and financial unit by the county board of education and its executive officers. Cities contained within the county, which maintain a full elementary and secondary school system, employing a certain number of teachers (for example, twenty-five) and a city superintendent of schools, may ask for and obtain a separate educational organization, except that all general school laws of the State shall apply, and that the county school tax shall be levied uniformly on all property within the county.

2. On the recommendation of the county superintendent of schools, each county board of education is to appoint all principals and teachers for the different schools of the county, outside of the separately organized city school districts, and to fix and order paid their salaries.

3. On the recommendation of the county superintendent of schools, each county board of education is to approve the courses of study and text-books to be used in the schools, the unit for the adoption of each being the unit of supervision.

4. Each county board of education to approve the employment of special teachers and supervisors for the schools, and, on recommendation of the county superintendent of schools, to appoint them, and to fix and order paid their salaries.

5. Each county board of education to have charge of the county library, and all of its branches, to appoint a county librarian and assistant librarians, and to provide for the care and development of the library and the circulation of books. The school libraries would become a part of the county library, and a branch library would be provided for in connection with most of the consolidated schools.

III. Business and Clerical Control.

1. Each county board of education shall appoint a secretary and business manager, who shall act as secretary for the board and shall have charge of the clerical, statistical, and financial work connected with the administration of the schools of the county school district. He is to approve all warrants drawn on the funds of the county, and to prepare the financial and statistical portions of the required annual school report.

2. The secretary of the county board of education to have general charge of all purchases of supplies for the schools and the distribution of the same, and to have general oversight of all janitor service and repair work, except as otherwise provided for by the county board of education.

3. For each consolidated school or small school retained (attendance subdistrict) the county board of education to appoint one local school director, to act as agent of the county board in the attendance subdistrict, and with power to make repairs as directed, see that the necessary supplies are provided, assist the principal or teachers in the maintenance of discipline, and act as a means of communication between the people whose children attend the school and the county board of education and its executive officers.

4. The secretary of each county board of education to be the custodian of all legal papers belonging to the county school district; to approve all bills and, when such have been ordered paid, to draw warrants for the same; to give all required notices; administer oaths; sign contracts as directed by the board; register all teachers' certificates; distribute blank forms and collect and tabulate the statistical returns; keep a complete set of books covering all financial transactions and all funds; and perform such other clerical and statistical functions as he may be directed to do.

5. Each county board of education to approve an annual budget of expenses for the schools of the county, both for school maintenance and for buildings and repairs, and may order levied, within certain legal limits, a county school district tax to supplement the funds received from the State school tax and the county school tax, the latter to be levied on all property in the county and divided between the city school district and the county school district on some equitable apportionment basis.¹

¹ This greatly simplifies and equalizes taxation. Under such a plan there would be a State tax (or appropriation) for education, a general county school tax levied on all property in the county, and then such city-district or county-district taxes as may be needed to supplement the amounts received from State and county funds. The inequalities of the present small district taxation would be abolished, and a pooling of effort on a large scale substituted instead.

6. Each county treasurer to act as treasurer for all city or county school districts in his county, and to pay out all funds on the orders of the proper city or county school district authorities, when approved by the secretary of the county board of education.

IV. Powers and Duties of the Superintendent.

In addition to those previously enumerated, the county superintendent of schools is:

1. To act as the executive officer of the county board of education, and to execute, either in person or through subordinates, all educational policies decided upon by it.
2. To act as the chief educational officer in the county, and as the representative of the state educational authorities. To this end he shall see that the school laws of the State and the rules and regulations of the State board of education are carried out.
3. To have supervisory control of all schools and libraries under the county board of education, and general supervisory control of all officers in its employ, with power to outline, direct, and co-ordinate their work, and, for cause, to recommend their dismissal.
4. To nominate for election, and when elected to assign, transfer, and suspend all teachers and principals, and, for cause, recommend the promotion or dismissal of such.
5. To visit the schools of the county, to advise and assist teachers and principals, to hold teachers' meetings and institutes, to direct the reading-circle work in his county, and to labor in every practicable way to improve educational conditions within his county.
6. To act as the agent for the State department of education in the examining and certificating of teachers, and to decide, upon appeal to him, all disputes arising within the county as to the interpretation of the school law or the powers and duties of school officers.
7. To oversee the preparation of the courses of study and to approve the same, to study the educational work done in the schools, and to approve for purchase all text and supplemental books and all apparatus and supplies.
8. To recommend changes in the distribution or the organization of the schools, to recommend the establishment of new schools or branch libraries, and to assist in the correlation of the work of the schools with that of the libraries, agricultural activities, and other forms of educational service.
9. To prepare and issue an annual printed report showing the work, progress, and needs of the schools of the county.

CHAPTER VI

THE GROWTH OF CONSOLIDATION

PRELIMINARY PROBLEMS

1. Consolidation began about fifty years ago. Can you account for its rapid development in only the last decade or two?
2. What factors have contributed most to the spread of consolidation?
3. What influences work most to bring about consolidation in your own State?
4. Why is the consolidation movement so slow in some sections of the country where it would be an entire success?
5. How can such retarding influences be met?

I. THE BEGINNING OF THE CONSOLIDATION MOVEMENT

It seems desirable at this time to set forth the main facts of consolidation in the United States. When consolidation, as the word is generally understood, began in the United States is difficult to say. Probably in the older States from very early times schools were abandoned for the sake of economy and the children sent to neighboring schools. In Massachusetts sufficient instances had occurred previous to 1869 to bring the question before the State legislature in that year as to whether children from an abandoned school district might be transported to another district at public expense. The legislature acted favorably and school trustees were authorized to pay for the transportation of children to a neighboring district out of the school funds. The law reads as follows:

Any town in the commonwealth may raise by taxation or otherwise and appropriate money to be expended by the school committee in their discretion in providing for the conveyance of pupils to and from the public schools.

Honorable Joseph White, formerly secretary of the Massachusetts State Board of Education, stated that the act was introduced into the legislature through the efforts of a practical man from one of the rural townships of large territory and sparse population, where the constant problem is how to bring equal school privileges to all without undue taxation. The first children carried to school at public expense under the provisions of this act were in the town of Quincy, in the eastern part of the State, the town in which Colonel Francis Parker gained his fame as a progressive school superintendent. There, in 1874, a school with less than a dozen children was closed and the pupils carried to another one-teacher school, the union making a school not too large for one teacher. The district abandoning its school, after paying tuition and transportation expenses, found that its outlay was less than the amount which would have been required to maintain the old school. No special educational advantages came to the pupils transported to such a union school, of course, except from the association with a greater number of children.

The Montague Consolidated School.—The first consolidation for the definite purpose of securing for the children *better educational opportunities* appears to have occurred in Montague, Massachusetts. There, in 1875, as a result of a campaign conducted principally by one of the school committee, Mr. Seymour Rockwell, three "district" schools were abandoned and a new brick building was erected at a central location, to which the children from the abandoned districts were transported at public expense. This school is still in a flourishing condition. It serves a territory of approximately twenty square miles. A high-school department was added very soon after the school was established and graduated its first four-year class in 1884.

The Concord Consolidated School.—The second consolidated school in the United States was probably one established in Concord, Massachusetts, the home of Emerson,

Hawthorne, Alcott, and others. A central building was erected in 1879, replacing several one-teacher schools. Concord at that time, with the township, included about 4,000 inhabitants. The area was about twenty-five square miles. For school administration purposes it was divided into two village districts and five rural districts. Prior to 1879 the common schools were twelve in number, occupying eleven houses. Five of these schools were in the central village; two, in the same building, were at West Concord; the remaining five were in the outlying farming districts. The district schoolhouses were at distances of from one and a half to three miles from the centre. At the centre was a high school to which pupils came from all parts of the township. The new building was appropriately called the Emerson School and contained eight rooms. When first opened it replaced the five schools of the central village. Later the other seven were taken in, one at a time. Thus both at Quincy and Concord we find the consolidated school arising in communities made intelligent and co-operative probably by their able men. "An institution is but the lengthened shadow of a man."

II. THE SPREAD OF CONSOLIDATION

Other Consolidation in Massachusetts.—Following the establishment of the Concord consolidated school came others in the neighboring townships. By the year 1888, 104 townships out of a total of 240 in the State were spending money for the conveyance of pupils. In the school year 1888-89 the amount paid for that purpose was \$22,118.38. In 1891-92, 160 townships and cities were paying a total of \$38,726.07 for transportation. In 1912-13 almost exactly ten times this amount was paid for the same purpose. Finally, in 1913-14, the amount so expended was \$426,274, and to-day it is over a half million dollars.

Consolidation in Ohio.—The movement spread from Massachusetts to other northeastern States and the West and South, until now it is doubtful if a State can be found in the Union without a number of examples of successful consolidated schools. Ohio and Indiana took hold of the idea earlier than most of the other States. Consolidation was easier to establish in these States than in the great majority of States, because both Ohio and Indiana, like Massachusetts, were organized on the township basis, although of a different type.

The first consolidated school in Ohio was the Kingsville school, in Ashtabula County. A. B. Graham, in a bulletin of the Ohio State University, says:

In 1892 the Kingsville township board of education was confronted with the necessity of providing a new school building. Their schools were small, and the per capita expense was unduly large. It was finally agreed to transport the children of the township to Kingsville, which was one of the district schools of the township. For the cost of transportation a special bill was introduced into the general assembly and became a law April 17, 1894. The measure applied only to Kingsville township. In the succeeding general assembly another measure was passed for the relief of the counties of Stark, Ashtabula, and Portage. On April 5, 1898, the assembly passed a general law on the subject. In 1897, one year before the law was made general, Mad River township, in Champaign County, transported eighteen children to Westville rather than establish a new subdistrict and build a new schoolhouse. This was the first step toward establishing a centralized school in western Ohio.

A law of Ohio, approved April 25, 1904, authorized the board of education in any township to suspend schools in any or all subdistricts in the township and convey pupils to a centralized school, with the provision that no school with an average daily attendance of twelve or more could be abolished against the opposition of the majority of the voters of the district. Following the passage of this law the movement for consolidation progressed rapidly. In 1910 there were 178 centralized or consolidated schools in the

State; 49 of these were township schools serving the entire township. In 1912 there were 192 townships out of 1,370 in the State with their schools completely or partially centralized. By 1914 there were 358 consolidated schools; by 1915 there were 468; and in 1916 there were 539. The last few years, as illustrated later by Preble County, have witnessed greatly accelerated progress.

Consolidation in Indiana.—Consolidation in Indiana was first agitated by Caleb Mills in 1856. Nothing of importance, however, was done until 1889, when the legislature passed an act recognizing the right of township trustees to pay for the transportation of pupils to consolidated schools. In 1912 there were in the State 589 consolidated schools, distributed in 70 of the 92 counties of the State. In 1914 there were 665 consolidated schools in 73 of the 92 counties in the State, attended by 73,404 children, or 35.9 per cent of all the pupils attending rural schools; 26,403 children were transported at an expense to the public of \$491,265. This is approximately 36 per cent of the children attending the consolidated schools. Between 1914 and 1916, 41 additional consolidated schools were established, making a total of 706.

A study of the consolidated schools in Indiana by the State Department of Education in 1916 revealed clear evidences that better educational opportunities are presented in the consolidated schools than in other rural schools. For instance, that better teachers are provided is demonstrated by the fact that the average daily wages paid in consolidated schools are \$3.37, as compared with \$2.76 in other rural schools. In spite of this greatly increased salary, the cost per pupil in the consolidated school is not much greater than in the other rural schools, the figures being \$25.64 and \$22.71 respectively; an insignificant difference when considering the greatly increased advantages. The establishment of so many consolidated schools has made high-school education possible to country

children within easy reach of their homes. This is evidenced by the fact that of the total number of children enrolled in the consolidated schools 22 per cent are in the high-school departments. That Indiana, after twenty-five years of experience with such a large number of consolidated schools, is satisfied with the type of school even when the expense is greater than that of the old type is evidenced by the rapidity with which district schools are being abandoned for consolidated schools. In the past five years, for example, the number of schools abandoned was over one thousand.¹

Consolidation in Other States.—Massachusetts, Ohio, and Indiana have established up to the present a greater proportion of consolidated schools than any other States. The extent of the movement elsewhere is given in the following pages. It will be noticed that it has gone furthest in States with large administrative units for school affairs—that is, in those with the county or the township organization; and that it has made little headway in States with the small “school-district” unit, except in a few where a relatively large amount of financial aid is given by the State as a stimulus.

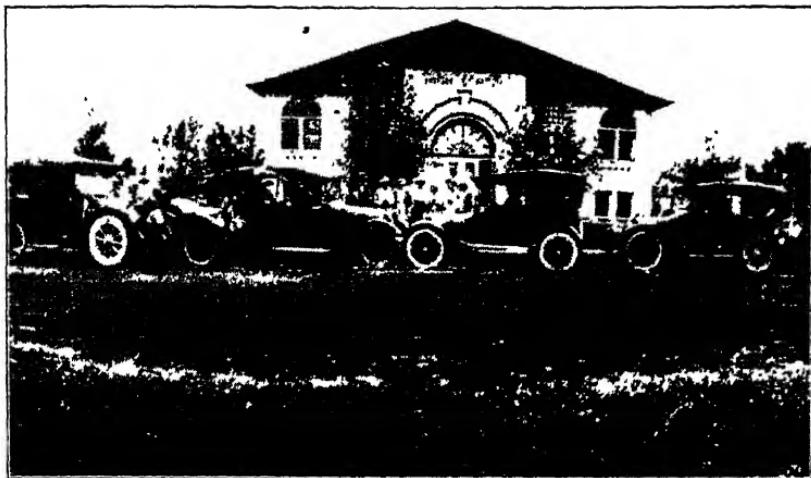
III. DISTRICT, TOWNSHIP, OR COUNTY UNIT—WHICH?

The Unit of Organization and Consolidation.—The dependence of the movement for consolidation upon the form of organization is well illustrated by the neighboring States of Indiana and Illinois, the first with about 706 consolidated schools, the second with less than 40. Indiana has been organized on the township basis since 1852, with all the schools in any township under the control of one agency. Illinois is organized on the district basis, the district being usually in rural territory, the area served by a single school. Each district has three trustees to manage the affairs of the

¹ Later returns may be obtained from the State Department of Education.

single school and to regulate the work of the teacher. The State has more than 10,000 one-teacher schools; these 10,000 schools with 10,000 teachers are managed by 30,000 trustees, three directors for each teacher. Consolidation under such conditions is difficult, since it means the formation of new districts out of two or more old districts, which is accomplished only after an adjustment of the business affairs and of the jealousies of the old districts has been reached. Experience shows that sometimes the district trustees are the most difficult persons in the district to convince of the advantages of consolidation. The honor of serving in their position is sweet to them and given up reluctantly. Many States are coming to the conclusion that three strong men are not necessary to hire and manage every young-woman teacher and are getting boards of five for units as large as counties.

The two States organized for the management of rural-school affairs on the single-district basis which have made notable progress in consolidation are Washington and Minnesota. Washington has paid from the State school funds to consolidated schools an annual bonus of \$170 for each school abandoned less one. To illustrate, if six districts combine and establish a single consolidated school, the new school has received each year from the State five times \$170. In Minnesota, previous to 1912, practically no consolidations were effected. In 1911 the legislature passed the Holmberg Act, under which consolidated schools are classified and aided from State funds. The first year under the operation of the act 141 old districts were formed into 60 new districts. In 1916 the State had 220 consolidated schools which replaced 454 schools of the old type. North Dakota, Missouri, Wisconsin, and Iowa adopted, in the 1913 session of their legislatures, measures somewhat similar to the Holmberg Act. North Dakota had at this writing 401 consolidated schools, Missouri 122, and Iowa 211. The greater progress in North Dakota is due to the



A Wyoming consolidated school



A type of many abandoned pioneer schools

fact that the State is organized for school administration in nearly all counties on the larger township basis.

Union Schools of North Carolina and Tennessee.—Both North Carolina and Tennessee made much progress in consolidation immediately after the adoption of the county unit of administration. In ten years, under the county system, North Carolina abolished 1,200 small districts and replaced 1,200 small one-teacher schools with less than 500 "union" schools, each with two or more teachers. To such consolidated schools public transportation was not necessary, as the districts were but from eight to ten square miles in area. Other consolidations with larger districts have taken place since, and transportation is furnished to about 50 schools. The union schools frequently draw in sufficient one-room schools to become first-class consolidated schools.

Tennessee, after giving up the district system in 1903, abolished more than 1,000 small country schools and replaced them with less than one-half as many union schools, of the same type as those in North Carolina. The larger consolidated school has been established also in many instances, approximately 60 requiring transportation at public expense.

IV. CONSOLIDATION IN SEMIMOUNTAINOUS REGIONS

Consolidation in Anderson County, Tennessee.—Anderson County recently completed an extensive plan of providing consolidated schools for all children in the county. This is an east Tennessee county, directly west of Knox County, in which the city of Knoxville is located. It is semimountainous. In the southern part the valleys are broad and there are good agricultural lands; in the northern part the valleys are narrow and the tillable land small in proportion to the total area. Coal is mined in parts of the county. In the northwest part of the county is located the coal village of Briceville, which became well known on ac-

count of two separate explosions in mines in the neighborhood, resulting in heavy loss of life. The county-seat is at Clinton, and Clinton has its own school corporation. The rest of the county in school affairs is under the county board of education.

In the county there are now in operation 16 consolidated schools, the last 9 of which were constructed and put into use the 1st of September, 1915. Most of these buildings are 6-room buildings and serve a territory of from 8 to 14 square miles. There is much land on the tops of the ridges on which no one is living. The population is therefore collected in districts smaller than the total areas served by the schools. A total of 7 transportation wagons are used for the 16 consolidated schools. The greatest distance that children may be required to walk in the State is two and a half miles. These buildings are so located that comparatively few children will be required to walk more than two miles. The territory served by each school stretches along the valleys between the mountain ridges, the children coming almost wholly from two directions.

All but 2 of the consolidated schools are brick buildings. The 9 buildings recently constructed cost approximately \$50,000, exclusive of equipment. Eight of them are exactly alike, with 4 classrooms located on the ground floor and 2 basement rooms half above ground, designed for manual training, agriculture, and cooking. From 4 to 9 teachers are required at each school. Provision is made for two years of high-school work at each school, in addition to the elementary work. Manual training, agriculture, or household economics is required of all children. The school lots are from 5 to 14 acres in extent, *the land in every case being donated by persons living in the neighborhood*. On each school site will be provided a cottage for the principal and his family, and they will be expected to board the other teachers. In several instances old schoolhouses are being converted into cottages. A part of the school grounds will

be used for school gardens; a large part, however, will be given to the principal for his own use with the understanding that it is to be cultivated as a model farm for the community and as a demonstration for the classes in agriculture in the school. The principals receive about the same salary as principals of similar schools elsewhere, but in addition are furnished the cottage rent free and the land for farming.

The school buildings and as many of the teachers' cottages as are in use serve as demonstrations. Each building is supplied with running-water piped from springs on the neighboring hills. The teachers' cottages are equipped with modern bathrooms. The people living in the district served by the school have an opportunity to see how houses may be provided with running-water, bathrooms, and sanitary closets, and it is expected that the example will cause the installation of similar conveniences in many homes. Two of the largest school buildings are heated by steam, the others by hot air.

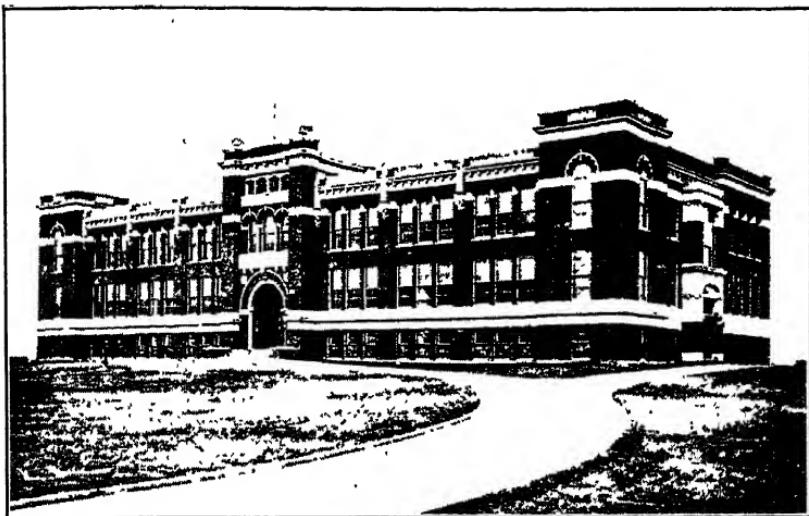
In one of the new buildings a separate auditorium has been built from money subscribed by persons living in the neighborhood. In all of the other buildings an auditorium is provided by throwing together two rooms ordinarily separated by a movable partition. The seating capacity of the auditorium in the eight buildings is about 200 each.

Each county in Tennessee is a unit in the administration of rural-school affairs. The county board of education has power to locate schools wherever it deems best and the schools are built from county funds supplied usually by bond issue; the bond issue, however, must be authorized by majority vote of the qualified electors of the county. At the regular election in Clinton County, November, 1914, a bond issue of \$50,000 for new school buildings was authorized. These bonds were sold to the highest bidder, one broker buying the entire lot at nearly \$400 premium. The county board determined where the new buildings should be erected and the kind of buildings to be supplied. When

these buildings were opened in September, 1915, 16 consolidated schools replaced approximately 58 one and two teacher schools. The county board is following a definite plan for the consolidation of all schools in the county. Its plans call for 28 buildings for the entire county; that is, there are 12 more to be built at a later date. It is probable that another bond issue for these 12 buildings has already been voted. The area of the county is approximately 350 square miles. Each of the 28 schools will serve, therefore, a territory of approximately $12\frac{1}{2}$ miles. On account of the mountainous character of much of the country, the inhabited territory served by each school is less than this amount. Thus the argument that consolidated schools cannot be established in mountainous regions falls flat through the force of this and similar examples. A long mountain valley with a trading village may be an ideal consolidated-school community.

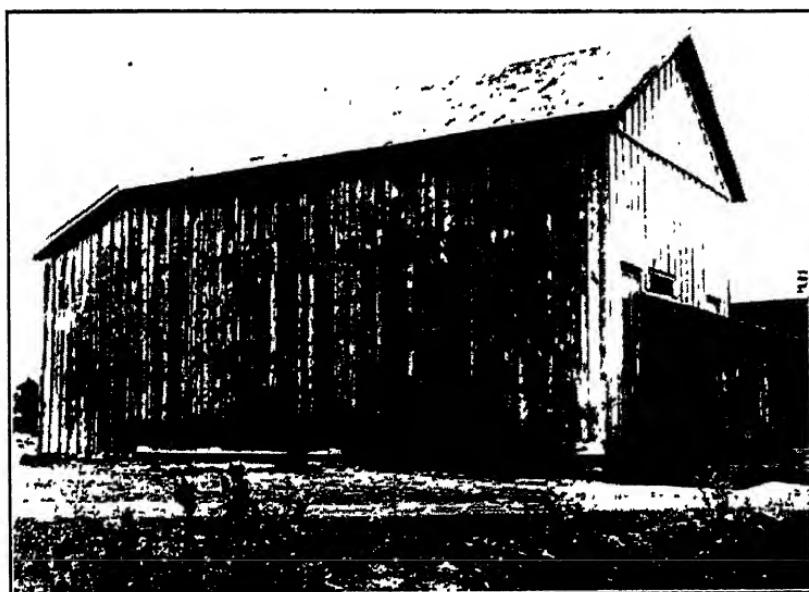
V. RECENT RAPID PROGRESS

The consolidated-school movement in all but a relatively small number of States is less than two decades old. In 1900 there were very few outside of Massachusetts, New Hampshire, Ohio, and Indiana. Since 1900 there has been an awakening; results came slowly at first, but have come very rapidly since 1910. From 1910 to 1916 there were probably twice as many consolidated and union schools established as in the sixty years before that period. The year 1911 is notable in school legislation, because of the laws passed by a large number of States in that period intended to promote consolidation. Among these is the legislation in Minnesota referred to above; also of importance legislation in Wisconsin, North Dakota, Oklahoma, Arkansas, Georgia, and Kentucky. In 1912 and 1913 other favorable legislation was passed, several States, notably Iowa, Wisconsin, Missouri, North Dakota, and South Carolina, passing laws



A consolidated school, Woodstown, N. J.

Not as desirable as the one-story type where land is comparatively cheap



From five to twenty such structures may be eliminated by one consolidated school

similar to those of Minnesota, under which special State aid is given.

The results in several of these States have already been noted. In others it is as follows: Arkansas had at this writing 125 consolidated schools, practically all having been established in the past five years; South Carolina had 700 rural graded schools receiving special State aid under the act of 1912 to encourage consolidation and graded schools in country districts; Kentucky had 41 consolidated schools which replaced 140 one-teacher schools. Transportation was furnished to 14. Georgia in 1915 had 159 consolidated schools to which 3,123 pupils were transported. There were approximately 40 more in 1916.

VI. THE MOVEMENT IN OTHER STATES

How Louisiana Began Consolidation.—The following interesting statement of the beginnings of consolidation in Louisiana is by the State superintendent of public instruction. Louisiana is organized on the county basis, the parish (county) board of education having complete control of the educational affairs of the parish.

The consolidation idea in Louisiana had its birth in 1902, and was due to a cyclone. In the parish of Lafayette a cyclone destroyed a one-room schoolhouse located about six miles from the town of Scott. This occurred during the session, and as the building of a new schoolhouse would cause the children to be out of school for a month or so, two public-spirited citizens, members of the school board, Doctor Moss and Mr. Judice, proposed to furnish a wagonette temporarily at their own expense to be used in transferring the children who had been attending the little school that was destroyed to the school located in the town of Scott. Their proposition was accepted by the board and the new plan put into operation. The idea worked out so successfully that the board decided not to rebuild the house, but to put in a permanent wagonette. Other communities in Lafayette heard of the new plan and petitioned the school board to place their children in central graded schools. In a year or so Lafayette parish had made practically every consolidation that was possible and was operating a

large number of wagonettes in which children were transported to central schools. Gradually the idea worked out through all parts of the State, and other parishes began trying the plan. The system now is general throughout Louisiana, practically every parish in the State having consolidated schools and most of them operating school transfers.

The number of strictly consolidated country schools (in 1913) is 210, and the number of school wagonettes in use is 259.

Since the above was written the number of consolidated schools has more than doubled.

Consolidation in Mississippi and Missouri.—The rapidity of the movement in the past few years is indicated by data from a few States. That of Mississippi is interesting. In the fall of 1907 the State superintendent appointed a committee of three county superintendents to prepare a report on the subject of the consolidation of schools. This report was adopted by the association of county superintendents, and a bill prepared providing for consolidation and transportation for the 1908 legislature. It failed to pass. The bill was reintroduced in 1910, amended and strengthened, and passed. Further amendments were found necessary, and these were provided in 1912. As the result of the 1910 bill and the 1912 amendments the State has established more than 290 consolidated schools and has more than 725 wagons in operation.

In 1912-13 there were organized 75 consolidated schools, with the children transported in 100 wagons. The average area of these 75 consolidated districts is 30 square miles; the 75 buildings erected cost approximately \$140,000. During the year Pearl River County replaced 31 schools with 6 consolidated schools, to which children are transported in 21 school wagons; Harrison County, one of the largest in the State, had 15 consolidated schools, and only 30 one-teacher schools were left at this writing.

In 1915 there were 192 consolidated schools to which 7,788 children were transported in 426 school wagons. By

1917 there were 290 consolidated schools with 14,643 children transported in 725 school wagons. This is less than one-half the enrolment, it being approximately 33,000 or an average of 112 to each school.

The story in Missouri is of similar interest. In August, 1912, Mr. W. P. Evans, then State Superintendent of Public Instruction, wrote:

The story of consolidation in Missouri is a short one. The laws are ready and nothing is needed but that they be taken advantage of; yet practically no consolidation exists. The laws of Missouri permit three or more common-school districts or a village district with two or more common-school districts to unite into a consolidated district. By a law passed in 1911, if two-thirds of the voters authorize it, transportation may be provided for from the school funds. While common-school districts are not authorized to maintain high schools, such consolidated districts may maintain high schools as well as elementary schools. Comparatively little has been done toward consolidation under these statutes, although the law permitting consolidation has been on the statute-books for eleven years.

Since this was written the State legislature, in 1913, revised the laws on consolidated schools and now special State aid to urge consolidation is given. By January 1, 1914, 29 consolidated schools had been established. Two years later Missouri reported 122 consolidated schools to which 7,000 children were transported in 400 wagons. Three of these have first-class approved high-school departments, 10 have second-class high schools, 50 have third-class. State aid brings results.

Activity in North Dakota.—North Dakota reported 333 consolidated schools in 1915, 205 of which are in towns and 128 in open country. This was an increase of 60 during the past year. In 1917 there were in operation 401, which have replaced 1,200 one-teacher schools. The records of the State inspector of rural schools show that the proportion of pupils enrolled in the eighth grade in the consolidated schools of the State is twice as great as in the eighth grades

of the other rural schools; also, that on account of these consolidated schools, the high-school enrolment of country children has increased over threefold in the past four years. Consolidation in North Dakota has been stimulated by the vigorous educational campaign conducted by the State Department and by special State aid during the past two years. In 1914 there were 271 legally consolidated schools in the State, 170 of which were located in villages and 101 in the open country. In addition there were 683 schools, each serving a large territory with pupils living more than two and a half miles from the school. Of these 683 schools, 263 transported pupils at public expense. Only 53 of them were commonly spoken of as consolidated.

Iowa Consolidations.—In 1912 Iowa had 47 consolidated schools with approximately 1,600 children transported. This was about one-fifth of the attendance at these schools. In 1913 legislation was secured to assist the movement. During the year following 55 were established, nearly all with two to four year high-school departments. These schools have been established under the provisions of an act of the legislature of 1913, giving special State aid for departments of agriculture, domestic science, and manual training in consolidated schools. Each school has a site of from 4 to 10 acres for agricultural teaching. In order to receive State aid the consolidated schools must meet the requirements of the State Department of Education concerning buildings, grounds, course of study, and qualification of teachers. All of these buildings have been approved by the department; all have satisfactory equipment for work in agriculture, manual training, and domestic science. Several of them have teachers' cottages on the grounds. The total number of consolidated schools in the State at this writing is 211.

The following statement, prepared by A. C. Fuller, State Inspector of Rural Schools, gives suggestive details of later date:

Consolidation of rural schools in Iowa means the organization by vote, town and country voting separately, of a district which shall contain at least sixteen sections of land. If a town is included in the district the building must be located there. Transportation along the public highway is provided for every child outside the town. If a school so organized possesses five acres of ground for playground and agricultural demonstration, plus suitable buildings and standard teaching force, State aid is given.

State aid and the steady promotion and publicity work of the Department of Public Instruction and allied agencies are responsible for the great interest and activity in forming consolidated districts.

For twelve or thirteen years a few communities maintained successful consolidated schools, new ones organizing near older centres. In April, 1913, there were seventeen schools. At that time the law authorizing aid went into effect and a field force was added to the State Department. Since then consolidated schools have been added at the rate of fifty-five annually, two hundred and thirty-nine being the number at date.

The following condensed statement indicates the present status:

1. Number of consolidated districts prior to April, 1913.....	17
2. Total number of consolidated districts August 1, 1917.....	239
3. Number of consolidated districts established in open country	28
4. Number of consolidated districts including towns over one thousand population.....	4
5. Number of consolidated districts including towns between one thousand and five hundred in population.....	27
6. Number of consolidated districts including villages less than five hundred in population.....	180
7. Average total enrolment in the consolidated schools.....	180
8. Average total enrolment in the high-school department.....	35
(Every consolidated school will have a standard four-year high school.)	
9. Percentage of pupils from rural districts.....	57
10. Average size of consolidated district, in sections of land.....	26
11. Minimum district receiving State aid, sections.....	16
12. Maximum district at date, sections.....	48
(Recent tendency is to form the larger districts.)	
13. Average size of school ground in acres.....	5+
(Many schools have eight and ten acres, and have employed landscape architects to lay out premises.)	
14. Number of consolidated districts providing a principal's home and a teachers' home.....	15
15. Average number of rooms in school buildings.....	12

(Nearly all the buildings are new, provide modern facilities for teaching agriculture, manual training, and domestic science, include a gymnasium and a room for community-centre activities.)

16. Increased school facilities provided by consolidation.
 - (a) Standard school work for 180 instead of 160 days.
 - (b) Twelve years of work instead of eight.
17. Increased cost per acre, in rural portion, for consolidated schools..... 12 to 18 cents
18. Number of one-room schools already closed through consolidation..... 1200
19. Number of consolidated schools disbanding after once trying out the plan thoroughly..... 0

Consolidation in Iowa is a success. It is regarded as the only satisfactory solution of the rural-school problem. These schools are forming more rapidly than leaders and principals who have the vision and rural-mindedness required to carry on the work are becoming available. Normal schools, educational departments, and all agencies concerned with the development of rural life should stress the preparation of leaders for consolidated schools.

No more potent activity exists than that which affects the welfare of our rural-school population. Every boy and girl should be within easy daily reach of a standard twelve-year school.

“ Graded Rural ” and “ Intermediate ” Agricultural Schools.—Wisconsin reported a considerable number of new consolidated schools. The State superintendent says:

The interest in the subject is continually increasing, and the sentiment is growing more and more favorable.

One phase of the consolidation question that is frequently overlooked is the rather marvellous growth of State graded schools. We have now in Wisconsin almost 600 of these institutions, employing 1,450 teachers, scattered over the State. About one-half of them are doing some work beyond the eighth grade. Each of these schools really becomes an educational centre which in many cases is equivalent to a consolidation centre. Another phase of the consolidation work is quite prominent in the State, namely, the establishment of joint and union high schools. This is essentially a phase of consolidation for high-school purposes. In these places the elementary education is taken care of in the local one-room district schools, while the secondary education is taken care of by the large high-school district.

New York State reported that about 100 consolidated schools have been established during the past year. In one instance 11 districts have been consolidated at West Chazy, Clinton County, in the Champlain Valley; and a philanthropic citizen of that vicinity is erecting an endowed building which will be one of the most completely equipped school buildings in the State.

Deputy Commissioner of Education Thomas E. Finegan points out that as a result of this movement in the consolidation of one-room schools several schools have been organized which will do the usual work of the eight grades in the elementary course and two years of high-school work. He says:

These schools are generally known as intermediate agricultural schools. The courses of study are along the lines of agriculture for boys and domestic science and home-making for girls. Teachers of agriculture have been employed in these schools on the understanding that they do continuation work during the summer vacation. The whole general trend in the courses for elementary schools is to include some work along agricultural lines so that the work of the school is brought into closer relation and has a direct bearing on the life on the farm. Special effort has been made to organize new schools.

Other States.—The number of consolidated schools in a few other States as reported by the State departments of education is as follows: California 27, Colorado 21, Delaware 1, Kansas 94, Nebraska 26, Nevada 3, South Dakota 24, West Virginia 24, with transportation and many without. In 1915-16, 250 one-room schools were abandoned and consolidated into small graded schools. In Wayne County 60 one-teacher schools have been replaced by 26 graded schools, with from two to four teachers.

VII. CONSOLIDATION OF RURAL SCHOOLS, 1917

On February 13, 1917, a request was sent to each State superintendent, asking the number of consolidated schools in the State at that time and the number that had been

established during the past three years. Answers were received from all except Arizona. The following is digested from the answers received from 30. The 17 not included reported that no data were available or their answers were too indefinite to be used. These 17 included Connecticut, Idaho, Maryland, Massachusetts, Montana, New Jersey, New Mexico, New York, Oregon, Pennsylvania, Texas, Utah, Vermont, Virginia, Wisconsin, Wyoming. Of course, the war slowed up or stopped building operations.

Of the 30 mentioned below, 26 report 5,132 consolidated schools. The number in Maine, Florida, North Carolina, and West Virginia is not given. These latter three, together with Massachusetts, New York, Texas, Utah, Virginia, and Wisconsin, have many consolidated or schools similar to consolidated schools. A conservative estimate of the total number in the United States, including "consolidated," "centralized," and "union" schools, is 7,500.

Alabama.—Total, 69 consolidated schools, 61 of which were established during the past school year; 166 schools were abandoned in making these consolidations; 48 of the consolidations were effected by bringing together two schools, 16 by three schools, 3 by four schools, and 2 by five or more schools.

Arkansas.—Total, 125, of which 86 were established during the past three years.

California.—Total, 27.

Colorado.—Total, 21.

Delaware.—Total, 1.

Florida.—The State Department has no record of the total number; approximately \$50,000 was paid in 1915-16 for transportation to consolidated schools.

Georgia.—In 1915-16 there were 159 consolidated schools to which 3,123 pupils were transported at public expense. "The number of consolidated schools is increasing approximately 25 per cent each year."

Illinois.—The State Department reports 10 consolidated schools, three of which were established during the past three years by abolishing 11 district schools.

Indiana.—Total, 706, 41 of which were established in the past two years.

Iowa.—Total, 214, 181 of which were established in the past three years. The number of schools abandoned for consolidated schools is 1,284; the average area for consolidated districts is 24 square miles.

Kansas.—Of the 94 consolidated schools in the State, 12 have been established during the past three years; 236 districts were consolidated to form these 94.

Kentucky.—Total, 41, 36 of which were established during the past three years. The 36 replaced 120 one-teacher schools. Only 14 of the consolidated schools furnish free transportation.

Louisiana.—The State Department reports 818 consolidated schools, of which 580 were established during the past three years. Included in this total number, however, are "all rural schools having two or more teachers, that is, all such schools located in communities of 2,500 population or less."

Maine.—No statistics are available relative to the total number; the number of one-room rural schools has decreased in the past three years from 2,459 to 2,358.

Michigan.—Total, 8.

Minnesota.—In 1916 there were 220 consolidated schools, of which 140 were established in the past three years. The consolidated schools replaced 454 schools of the old type.

Mississippi.—Nearly all the consolidation has taken place in the last five years. In 1916 consolidated schools were found in 64 counties. There were 290 schools with 977 teachers, 725 wagons, and 14,643 pupils transported. The enrolment in the schools was 33,037.

Missouri.—Total, 122, all consolidated within the past three years.

Nebraska.—Total, 28.

Nevada.—Three consolidated schools effected during the past three years take the place of six schools of the old type.

North Carolina.—In the year ending July, 1916, 84 districts were consolidated into 36 new districts. Since 1913 the number of one-teacher schools has decreased 516, or 14 per cent.

North Dakota.—Total, 401, 211 having been established in the past three years. The 401 replace approximately 1,200 schools of the old type.

Ohio.—Ohio in 1914 had 358 consolidated schools; in 1915, 468; in 1916, 539.

Oklahoma.—Total, 103, of which 19 were established during the past two years; 77 of these consolidated districts replace 215 old districts.

Rhode Island.—In the State there is one consolidated school established by the union of four ungraded schools; 23 other ungraded schools have been closed and the pupils transported to graded schools already established.

South Carolina.—Four hundred “rural graded schools” were in operation in 1914-15, 562 in 1915-16, and 700 in 1916-17. These are the schools receiving special State aid under the act of the State legislature of 1912 “to encourage consolidated and graded schools in country districts.”

South Dakota.—Total, 24, of which 20 were effected during the past year.

Tennessee.—Total, 404, of which 261 were established during the past three years.

Washington.—June 30, 1916, there were 161, 39 of which were established during the past three years.

West Virginia.—There are 24 consolidated schools which provide transportation, and a considerable number of others without transportation. In 1915-16, 250 one-room schools were abandoned and consolidated into small graded schools. In Wayne County in six years 60 one-room schools have

been consolidated into 26 graded schools of from two to four rooms.

Thus we see that this movement is rapidly spreading over the entire country. Good roads, the increased use of automobiles, the county unit for school administration, State aid, and teachers better educated for rural-life leadership will greatly accelerate the movement.

PROBLEMS IN APPLICATION

1. Study the growth of consolidation in some one county if possible and note particularly the factors that promote and retard the movement.
2. What is the record as to the giving up of consolidation after it has been established in this country?
3. What States have most consolidated schools of the highest type?
4. What type of region had best not attempt consolidation?
5. Are there any typical regions in the United States where there are not now successful consolidated schools—thus, mountainous, cold, blizzly, bad-roads, long-haul, backward-population, poor, and other regions?

BIBLIOGRAPHY

The bibliography here is mainly in the form of State, national, and other reports. A few writers have given brief histories of consolidation but the essential facts will be found in the writer's "Consolidation of Schools and Transportation of Pupils at Public Expense." The reports of the United States Bureau of Education should be watched for résumés of the spread and development of consolidation. Just now it is spreading more than developing. Later will come a period of improvement in which the best schools that have started well and grown by experimentation and study will become the standard for all to attain.

CHAPTER VII

A VISIT TO A CONSOLIDATED SCHOOL

PRELIMINARY PROBLEMS

1. "Get yourself ready" for a delightful visit with Mrs. Cook, of the United States Bureau of Education, to a progressive consolidated school in the West and secure also a bird's-eye view and the concrete detail necessary for a close study of many aspects of the consolidated school in succeeding chapters.
2. If possible, visit a consolidated school within your reach.

I. LOCATION AND HISTORY

After the preceding discussions of the practical problem and the social and administrative setting of the consolidated rural school, the reader will be interested to visit with us such a school.

The "crossroads" village of La Porte, Colorado, contains a blacksmith-shop, post-office, and store combined, and a few houses, and is located about three miles north and west of the city of Fort Collins, the seat of the Colorado State College of Agriculture. The village does not present a dignified appearance from an architectural standpoint, although it has a distinguished history, for at one time it aspired to be the capital of the State, an honor which it lost by but one vote to the neighboring city of Golden; and it was for some years the county-seat of Larimer County. While the village itself, judging from its present appearance, has degenerated somewhat from those illustrious days, the surrounding country has not suffered a similar experience. It is one of the most productive sections of northern Colorado. Orchards line the roadways and apple-laden hay-racks pass the visitor on the way; small fruits, sugar-beets, alfalfa, and grain are raised in abundance, and stock

and dairy products help to make a thrifty and prosperous community.

Near the village trading centre in the midst of farms and orchards located in the open country is the Cache La Poudre Consolidated School. Less than four years ago five one-teacher schools and one three-teacher school in four different districts served the educational needs of the farm people living in the vicinity of the village of La Porte. About that time the State College of Agriculture near by was moved by the spirit of better country life and appointed a "rural-school visitor" as a member of its faculty. The visitor in December, 1912, on the invitation of the principal of the school at La Porte, spent several days visiting and interviewing the people in the homes of the neighborhood and collecting statistical data on attendance and financial conditions and possibilities, from the schools and from the county superintendent's office. According to the investigator, the buildings were in bad condition, four of them unfit for use; the majority of the teachers were such as you usually find in country schools of this kind; the attendance was poor and the schools in general woefully inefficient.

A Survey and Publicity.—The result of this survey of the districts seemed to the majority of the leaders in the community to justify immediate consolidation. The weeks following the survey were devoted to a campaign of education for the community during which meetings were held in all of the districts involved and the matter of school consolidation enthusiastically agitated. In April, 1913, an election was held to decide the question and the majority voted in favor of the new plan. In June bonds were voted for a \$26,000 building, the corner-stone of which was laid July 2, 1913. In the following September the new building was opened to the children of the combined territory of the four districts immediately surrounding it and was named from a near-by river, the Cache La Poudre. The consolidated district is approximately 25 square miles in area,

contains 170 families and 325 census children. The school building, while not in the geographical centre, is strategically located with reference to the population. The visit here described was made when the school was in its third year.

II. THE SCHOOL PLANT AND TRANSPORTATION

Rarely does one find a more beautiful natural site for a school building than that selected by the trustees in charge. Majestic old cottonwoods are lined in rows at each side and at the back of the building and massed at one side in the rear near the playground. In the background, less than fifty miles to the west—seeming, in the clear atmosphere of the November day, not more than ten—is the main range of the Rocky Mountains, capped in the distance by three of its highest peaks. From the athletic field, from the front entrance, from the west and south windows there is, at all times, for the delight of the nature-lover—and all country dwellers, especially children, should be nature-lovers—a magnificent view of more than one hundred miles of perpetually snow-covered mountains.

As the visitor enters the building from the road he may notice among the tall trees at the left swings and other play equipment. Still at the left and toward the rear of the building is the manual-training shop. At the right are more trees, a larger playground, the athletic fields, and the superintendent's cottage. Surrounding the school grounds are farms and orchards—apples and small fruits being important products of this section.

The building itself is a substantial brick structure of two stories with a commodious basement. The latter is almost entirely above ground, and the schoolrooms proper must, therefore, be reached by a number of stone steps leading directly to the wide hallway. In the centre of the hallway a staircase leads to the upper floor. On either side are two classrooms for the elementary grades. Ascending

the stairway one passes on the landing and at the rear of the building a small sunny sewing-room whose sashed windows shut it from view from the stairway and at the same time proclaim its purpose to the visitor. Continuing to the second floor there are two small rooms at the front. One serves as library and superintendent's office and one as the teachers' retiring and rest room. The high-school assembly-room occupies one entire side of the upper floor with the door entering it near the head of the staircase on the left. On the right are the laboratory and a large classroom.

The assembly-room is lighted from the south and west. The side nearest the hall has a movable wooden partition. This can be so raised as to form, with the hallway, an auditorium of reasonable size. The school owns a supply of folding-chairs, and comfortable seating arrangements can thus be provided for the various recreational activities of which the school is the centre.

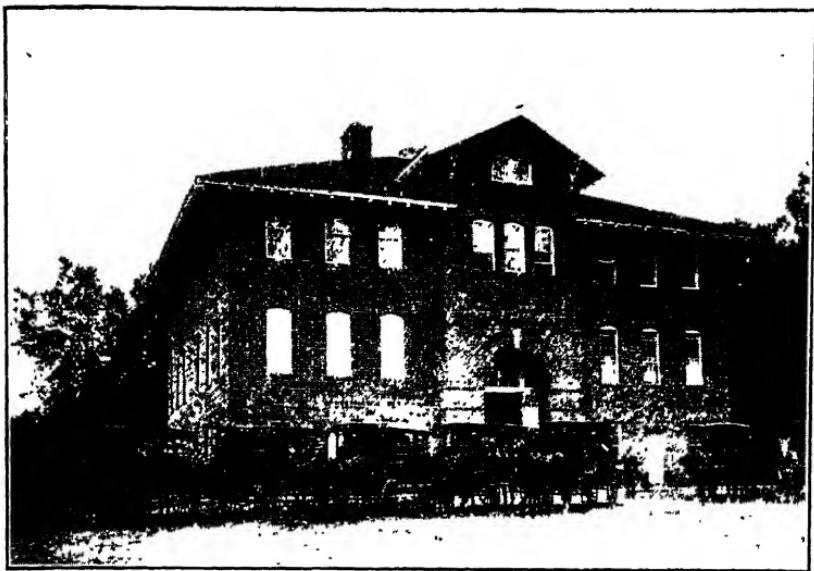
The rest-room is furnished with a couch, rug, table, and chairs, and is comfortable and inviting. The library is not large at present but the books are well selected and will form a nucleus for a reference and circulating library of more pretentious size when circumstances permit. The laboratory is supplied simply with the usual apparatus for chemistry and physics, a separator, and an eight-hole Babcock milk-tester.

The basement contains two large rooms, one at each side of the front entrance. These serve as lunchrooms and stormy-day playrooms. One side is assigned to the boys and the other to the girls. Adjoining these rooms are the toilets, which are of modern sanitary type and are kept clean and wholesome. The floors in the basement are of cement, and the rooms here are all light, dry, and "airy." At the rear of the building and near the foot of the inside stairway is the kitchen, equipped with individual cooking-tables and closets; cupboards for supplies, sink, water, oil-stoves, and other necessaries.

The outside manual-training shop, previously mentioned, is a commodious frame building remodelled from one of the old schoolhouses. The benches are of simple home-made variety and the equipment is adequate but not elaborate. This shop is made to approximate as nearly as possible the better type of workshop of the ordinary farm. It is heated with a stove and contains two rooms.

The superintendent's home is also a remodelled building, being one of the best of the old abandoned frame schoolhouses. It has large, pleasant rooms, a screened porch along the front and rear, and a bathroom. This "teacherage" is part of the school property, built especially as the home of the superintendent. No rent is charged, its use being allowed by the board in addition to the regular salary paid.

The school board has also a three-year lease on a small orchard, house, and barn which adjoins the school grounds. This is subleased to the eighth-grade teacher, who is a married man and who occupies the cottage and cultivates the ground. During the year preceding the time of visiting the school this teacher sold almost enough from the land to pay the rent in addition to supplying his own table. In addition to these two residences controlled by the school board, four rooms in the basement of the main building were finished and set apart for the janitor's residence. So the district really houses three of its employees with their families. The janitor receives \$45 per month, house room, light, water, and fuel. He lives in the building throughout the year and is responsible to the board for its proper care at all times. According to the rules of the board published in pamphlet form for general distribution, the "janitor shall be the assistant executive officer of the superintendent to help carry out all the rules and regulations of the board and superintendent so far as they may apply to the buildings, grounds, and discipline. When school is not in session he shall be in complete control of the building, subject only to the orders of the school board."



The Colorado school visited by Mrs. Cook

Two-story building of old-style architecture, but good school work within and without



A movable partition for auditorium use, Cache La Poudre school

The classrooms are all large and well lighted. There are cement walks, oiled floors, and adjustable desks of a modern and approved type. There are sanitary drinking-fountains on both floors. The water is piped from the Fort Collins city system and is pure, soft, mountain water. The walls are finished in hard plaster and in each room is hung at least one good picture, several of which are copies of well-known masterpieces of art. The woodwork is in natural finish; the windows are fitted with shades, and in general the interior has the appearance of simplicity, appropriateness, and comfort.

The play and athletic grounds are marvels of good sense in selection. The plant, exclusive of the leased orchard, covers four and one-half acres, including a half-acre orchard and garden used by the superintendent and the janitor. The grounds are made not alone beautiful but cool and inviting by the shade of majestic trees, and the play apparatus, all of which is home-made, is so placed as to utilize this advantage. There are two swings, two giant strides, and eight teeters, all placed about the building close to the trees and out of range of the ball-fields. The accompanying pictures give some idea of the distribution. On the athletic field are two basket-ball fields, football gridiron, and baseball diamond. The principal says they are *all* in *constant* use, including the apparatus for play.

Transportation.—Transportation being the rock on which so many thriving consolidation schemes have split, it is a real pleasure to find that there are no complaints and no dissatisfied murmurs in regard to this phase of the school management. The district owns seven substantial covered wagons, each of which cost approximately \$200. The teams are owned by the drivers and are valued at about \$400 each. The district, as related above, covers twenty-five square miles, and the wagons transport the children distances varying from three to five miles. The number of children carried in each wagon varies from seventeen to twenty-four or

more, the aim being to keep the number below twenty-four if possible. The total number transported averages 160 pupils daily. The school board awards a contract to the lowest bidder, providing he is a satisfactory person, but reserves the right to reject any or all bids. The qualifications required are very exacting, only mature, responsible men being eligible, and a \$500 bond required. By the terms of the contract the driver is to take entire charge of the children on his route, to be accountable for their welfare, to see that they conduct themselves in a proper manner, and to report all misconduct on the part of the children to the principal. The contract also stipulates that no profane language shall be used either by driver or the children and that the driver maintain a time schedule and provide proper housing and care for the wagon. In addition to these stipulated regulations the rules of the school before referred to provide that there shall be two time-tables furnished to patrons on a "route-sheet," one for good roads and one for bad roads; that the driver must not vary from the time-table once established and must not pass the point of stopping if the pupils are not ready until five minutes after the time scheduled, unless he be notified that the pupils will not attend school that day.

Pupils are required to remain seated while the wagon is in motion; to be at the proper place on time; to refrain from boisterous or profane language. The use of tobacco by pupils or driver is forbidden while on the wagons. Even parents may not censure drivers on penalty of having their children excluded from the privilege of the wagons. All necessary complaints must be made to the superintendent.

The routes are so planned that no child rides in a round-about way. When he enters the wagon he is headed directly for the schoolhouse. In the morning the drivers go to the end of the route and pick up children on the return. After school the children are taken directly home. The salaries of drivers and distances travelled by each are as follows:

	SALARY	DISTANCE
No. 1.....	\$40.00	3½ miles
" 2.....	37.50	3½ "
" 3.....	49.00	5 "
" 4.....	39.80	4 "
" 5.....	34.00	3 "
" 6.....	47.50	3 "
" 7.....	49.50	4 "
Average.....	\$42.47	3½ miles

III. THE WORK OF THE SCHOOL

During the last two years under the *old* system, with four districts and six schools, the territory now comprised in the consolidated district had a school census, enrolment, and attendance as follows:

Year.....	1912	1913
Census.....	230	269
Enrolment.....	238	228
Average daily attendance.....	155	138
Percentage of attendance to enrolment.....	65	60
Enrolled in high school in district.....	0	0

For the year 1916, in the consolidated school, corresponding figures are as follows:

1916 325 220 198 90 45

Here we see a high-school enrolment raised from nothing to forty-five pupils, and an attendance increased 30 per cent.

For the month of December, 1916, the principal reports no tardiness in the elementary school and but six cases in the high school. There are relatively few foreigners in the district and Americans predominate in the school enrol-

ment. There are, however, about 22 per cent of Mexican and 12 per cent of German parentage.

The increase in attendance and percentage of attendance to enrolment since consolidation has continued very marked. Before the consolidation was effected there was no high school nearer than that located at Fort Collins, a city of about 10,000 inhabitants, at a distance of more than six miles from some of the homes. At the time of the visit there were 45 pupils enrolled in high school and 175 in the grades. In June, 1915, twelve pupils finished the eighth grade, ten of whom entered high school the following autumn. In June, 1916, ten completed the eighth grade, *all* of whom entered high school in the fall of 1916. Others from outside the class entered high school, giving the entering class an enrolment of 18. The school's ability to hold children through the grades is represented roughly by the following data showing enrolment for all grades for the four months preceding January, 1917. Little decrease in grade enrolment as we go upward through the grades is present.

Year.....	I	2	3	4	5	6	7	8	I	II	III	IV
Enrolment.	29	25	25	30	37	19	16	12	18	11	19	8

Teachers.—Including the superintendent, who teaches mathematics and agriculture, nine teachers are employed. Of these, three are men and six are women. Three women and one man devote their entire time to the elementary grades, two grades being assigned to each; three devote their entire time to the high school, and two special teachers divide their time between the high school and the elementary grades. All of the teachers but one are graduates of normal school or college, five having A.B. or B.S. degrees. Four receive \$75 per month, one \$80, and three \$85 per month. The seventh and eighth grade teacher is paid for twelve months in the year, the others for nine months. The superintendent was serving his second year of a three-year

contract by the terms of which he was to receive \$1,300 the first year and \$100 per year increase for each of the remaining two years. He was then getting \$1,400 and the use of a house and orchard. Two of the men teachers, as related above, have homes on the school grounds. One unmarried man and three women board in the district. The other three are permanent residents in the district and live in the homes of their families. The cost of board and room is about \$22.50 per month.

Organization.—With respect to the organization of the work of the school we have stated that the school includes the eight regular elementary grades and four years of high school. Manual training, cooking, and sewing begin in the sixth grade and continue through the remainder of the elementary course and high school. Agriculture begins in the seventh grade and continues throughout the remaining six years of the course. The sixth-grade girls have one recitation per week of ninety minutes' duration in domestic science, while the boys devote the same period to manual training. The pupils of the seventh and eighth grades and high school devote two periods of one and one-half hours each per week to these subjects. In addition to manual training and household economics, agriculture has a prominent place in the curriculum. In the seventh and eighth grades a course in elementary agriculture is given; in the ninth grade physical and commercial geography and soils; in the tenth grade animal life and agricultural botany; in the eleventh grade advanced agriculture and stock-judging; in the twelfth grade rural economics. Special attention is given to milk-testing for neighboring farmers and to testing cream and skimmed milk.

Drawing and music are taught throughout the grades and high school. One half-hour period per week in the grades and one forty-five-minute period per week in high school are devoted to each of these subjects. There are four sections in the elementary school, two grades in each,

and one in high school for this purpose. The teacher in charge of manual training also teaches history and algebra in the high school. Another special teacher has charge of all the music, drawing, cooking, and sewing in the grades and high school. This arrangement allows the inclusion in the curriculum of a variety of special subjects at a minimum cost. The high school is one of the 70 high schools (of the total of 247 in the State) which are on the accredited list of the State University.

Six-Six Plan.—After 1917 the superintendent expects to adopt the six-six plan of organization. At the time of our visit the following subjects were offered in the high school. Electives are placed in the second column. It should be noted that history, four years of English, and drawing and music were then all required subjects:

REQUIRED	ELECTIVE
General history.	Rhetoricals.
American history.	Latin.
Civics.	German.
Algebra.	Chemistry.
Geometry.	Physical geography.
Rhetoric.	Commercial geography.
English composition.	Agriculture.
English literature.	Animal husbandry.
American literature.	Farm arithmetic.
Physics.	Farm management.
Zoology.	Rural economics.
Agricultural botany.	
Cooking.	
Sewing.	
Manual training.	
Drawing.	
Music.	

As an illustration of the organization for the instruction in manual training, sewing, cooking, music, and drawing, a portion of the daily schedule of the seventh and eighth grades is appended. The full programme for the sixth grade is given as an illustration of the division of time possible in

a consolidated school as compared with that of a one-teacher school in which there are from 25 to 40 recitations daily:

Sixth Grade Programme

A. M.

9.00- 9.15	Music—Opening exercises	Music and drawing on Wednesdays and Fridays
9.15- 9.40	Recite reading	
9.40-10.10	Study geography	
10.10-10.30	Recite geography	
10.30-10.45	<i>Recess</i>	
10.45-11.15	Study arithmetic	
11.15-11.40	Recite arithmetic	
11.40-12.00	Study physiology. (History first half year)	

P. M. *Noon*

1.00- 1.20	Penmanship
1.20- 1.50	Study language
1.50- 2.00	Grammar drill
2.00- 2.10	Physical exercises
2.10- 2.30	Recite language
2.30- 2.45	<i>Recess</i>
2.45- 3.10	Study spelling
3.10- 3.20	Recite spelling
3.20- 3.35	Recite physiology. (History first half year)
3.35- 4.00	Study reading—phonics

Seventh and Eighth Grade Programme

A. M.

9.00-10.30, Mon., Tues., Wed., and Fri.	Reading and arithmetic
Thurs.	Music, drawing
10.50-12.00	Fri.—Sewing and manual training
10.50-11.45	Mon., Tues., Wed., and Thurs.—Civics and history
11.45-12.00	Mon and Wed.—Physical exercises
	Tues., Wed., and Thurs.—Physiology

P. M.

1.00- 2.30, Mon., Wed., Thurs., and Fri.	Reading, language, writing
Tues.	Sewing and manual training

Course of Study.—The course of study followed differs from the conventional course in the emphasis placed on manual training, agriculture, cooking, and sewing, and the opportunity which the inclusion of these subjects gives to

correlate the traditional topics with matters concerned with home and farm work. The course offered is highly vocational from the point of view of the boys and girls who are to make farming and farm home-making a life-work. In order that the work given at school may reflect as correctly and as closely as possible that which should be carried on in the homes and on the farms, not only are the projects given in the vocational subjects of a highly practical nature but the equipment used, tools, benches, cooking utensils, materials used in making articles and in preparing foods, are such as are at hand on the neighboring farms. In the manual-training classes, planing, joining, squaring, and the fundamentals of primary woodwork are taught to the younger boys; the making of milk-stools, benches, wagon-jacks, letter-boxes, chicken-coops, yard-gates, bookcases, cement work, and other projects of a similar nature are carried through the upper grades. The cooking is of the practical every-day foods used on the farms in the community and a very close estimate of costs and food values is adhered to. The visitor found each girl in the sewing-class making a different garment or working on a different article. The girls are required to do home sewing, and must bring materials from home for making articles which are needed and used after completion in the home. They have freedom of choice as to styles, materials, etc., under the guidance, of course, of the teacher in charge. The aim is both to fit for and to help improve the customary activities of the home and farm.

Another departure from the traditional rural-school curriculum is the teaching of music and drawing throughout the course and the emphasis placed on games and athletics. The high school offers also not only the vocational subjects mentioned but also a reasonable variety for selection of history, science, languages, and mathematics which must be studied to prepare for the professional or liberal-arts college courses. The student who wishes to enter a higher institution and prepare for a profession or for a vocation other



Girls gaining domestic efficiency



Practical sewing for Colorado girls

Cache La Poudre School

than farming has the opportunity by a wise selection of subjects to obtain full preparation. The high-school department offers four years of English, two of history, and two each of Latin and German, besides four years of music and drawing.

In these practical days when so great emphasis is being placed on the education which leads to better and more intensive soil cultivation and a higher state of productivity, it is well not to lose sight of the fact that improved rural life is not *all* mere bushels to the acre. The highest mission of the school is but partially accomplished when this end is reached. Vocational efficiency is but one of the five social aims previously stated. Economic prosperity must be accompanied by spiritual and ethical development and the ability for enjoying refined leisure before the country school will produce an intelligent and contented farm population. To this end more emphasis will probably be placed in the future on such subjects as literature, civics, ethics, and avocational subjects.

Supervised play and school athletics also receive careful attention in both the high and elementary school. The grounds are well equipped with home-made apparatus for the small children and are carefully supervised by the teachers. Both boys and girls have basket-ball teams which are shown in the accompanying photographs, as is also the football squad. We have mentioned the baseball diamond used by pupils from the grades and high school. The high-school boys are expected to spend one-half to one hour each day in some form of athletics. The girls have gymnastics three days a week and glee-club work two days.

IV. COMMUNITY SERVICE

The influence of the school is not confined to the walls of the building or the boundaries of the campus, but extends to the limits of the district and even beyond it into other rural districts of the county. The community gath-

erings begin in September with the annual county play-festival for third-class (rural) districts and continue until the commencement programme closes the "season" in June. The programme for the 1916 county play-festival is given on the opposite page. Worthy of special note are the community singing, high-school orchestra, and the basket lunch. The inside gatherings begin in November and are held in the auditorium previously mentioned. A lecture course of seven numbers begins about November 3 and ends about March 17. Reproductions of handbill announcements are given on accompanying pages.

Besides the festival and lecture course the year's entertainment programme includes seven literary society evenings, which are, according to the superintendent's description, "old-fashioned lyceums," a box supper, ladies' aid supper, Hallowe'en social, Christmas programme (school), a lecture and play by home talent, four political meetings, eight parent-teacher association meetings, two plays, a public auction, two receptions, and two commencement programmes. The announcement of the parent-teacher association for 1916 is appended:

November 8

Uniform Dress in School and Graduation.....Mrs. W. Mullen

December 6

Demonstration of School Lunches.....Miss Clara Mellor

January 3

Mission of the County Superintendent.....

.....Larimer County Superintendent

February 7

Teaching Children Thrift.....J. A. Sidney

March 7

Rural Life in Home and School.....Mrs. H. T. French

April 4

Care of the Children's Teeth.....Dr. H. J. Livingstone

May 2

Special Programme by Girls' Camp-fire Organization.

Larimer County's Second Annual Play Festival for Third Class School Districts

SATURDAY, SEPTEMBER 16, 1916

Cache La Poudre Consolidated School

Teachers, Parents, Pupils and Friends are Cordially Invited to
Attend. Come Early, Bring Your Lunch
and Spend the Day

PROGRAM, 10 A. M.

MUSIC	High School Orchestra
ADDRESS OF WELCOME	Emma T. Wilkins
MUSIC—THE COLORADO STATE SONG	School Children
THE VALUE OF THE PARENT-TEACHER ASSOCIATION	Mrs. John H. Weldon, District No. 8
MUSIC	High School Orchestra
A TALK AND DEMONSTRATION ON EDUCATIONAL GYMNASTICS IN OUR SCHOOLS	Mrs. Hiram T. French, Fort Collins
STORY TELLING	Community Singing
MUSIC	(Noon Hour—Basket Lunch)

PROGRAM, 1:30 P. M.

50 YARD DASH—GIRLS	} A Race For Each Grade
50 YARD DASH—BOYS	
100 FT. RACE	Members of School Board
HIGH JUMP.	
BROAD JUMP.	
BASKET BALL GAME.	
CAPTAIN BALL GAME.	
TUG OF WAR.	
SWINGS, TEEETERS, GIANT STRIDES, ETC.	
VARIED GAMES FOR HOME, PLAYGROUND AND NEIGH- BORHOOD.	
FOOT BALL GAME.	

Reproduction of handbill

Buy a Family Ticket
TO THE
CACHE LA POUDRE
Lecture Course
All Your Family to be Admitted
to the Seven Numbers
for \$1.00

Dr. E. D. Phillips, "What Everybody Likes," November 4.

C. A. C. Conservatory Faculty, Music and Reading, November 25.

Prof. Jno. R. Bell, "The Significance of Attitude," December 16.

Colorado Agricultural College Band, January 13.

Prof. H. D. Black, "The Cliff Dwellers," February 3.

C. A. C. Ladies' Glee Club, February 24.

C. A. C. Men's Glee Club, March 17.

BUY YOUR TICKET NOW

The Morning Express Print

Reproduction of handbill

Up to the date of writing (February, 1917) the various entertainment features have attracted during the present year an aggregate attendance of 3,000 people. Family tickets at \$1 each for the lecture course have been sold to 120 families.

Besides these activities, the regular school election day in May is made the occasion of a kind of spring festival. It has become the custom since consolidation to include among the board membership a resident of each of the old districts as they existed before consolidation in order to keep the board as representative as possible. A half-holiday is declared and a programme is given by the school. An exhibit of the year's work, both manual and academic, is shown; articles made in the manual-training department are auctioned off, and a food sale is managed by the cooking classes. The proceeds of this sale supply much of the material used during the school term for cooking and manual training. The voting for school-board members follows the above programme. It is not difficult to see how community spirit is preserved and promoted in the district, co-operation between parents and teachers encouraged, school pride strengthened, and the spirit of fellowship which fosters the desire to keep the board representative of the *whole* of the consolidated territory maintained. Altogether we have here the beginnings of a type of school far superior and infinitely more progressive than the type of schools displaced. As an experiment in a new type of rural education the consolidated school is very promising. That it will immensely improve as time goes on is to be expected in democratic, progressive America.

PROBLEMS IN APPLICATION

1. What features of this particular school most appeal to you as worth while?
2. What features would you condemn?
3. If possible, learn of later improvements in the school.

the open country. The principal of the school should be required to live in the principal's home, keep it as a model home for the community and cultivate the farm as a model farm, with garden, orchard, poultry-yard, dairy, and whatever else should be found on a well-conducted, well-tilled farm in that community. He should put himself into close contact with the agricultural college and agricultural experiment station of his State, the departments of agriculture of State and nation, farm-demonstration agents, and other similar agencies, and it should be made their duty to help him in every way possible. The use of the house and the products of the farm should be given the principal as a part of his salary, in addition to the salary now paid in money. After a satisfactory trial of a year or two a contract should be made with the principal for life or good behavior, or at least for a long term of years.

In this way it would be possible to get and keep in the schools men of first-class ability, competent to teach children and to become leaders in their communities. The principal of a country school should know country life. A large part of country life has to do with the cultivation and care of the farm. The best test here as elsewhere is the ability to do. The principal of a country school in a farming community should be able to cultivate and care for a small farm better than, or at least as well as, any other man in the community.

This summarizes some of the principal considerations relative to the site and the uses of the site of the modern consolidated school established to teach country boys and girls in terms of rural life and industries. Most of the earlier consolidated schools were located in villages. This was particularly so in Massachusetts, where the term in general use, "town school" instead of consolidated school, indicates the location. It was a school to serve the entire town or township, and was as a rule located in the village at the most central point so far as the population was concerned. It meant that the school in the village was enlarged and schools in the surrounding farming sections were closed, and the children brought in to the town. This was true also in Indiana and in Ohio, where the term centralized school was adopted instead of consolidated. The tendency in the past few years is to locate the consolidated school in

the country where several acres of land are available for playground and for agricultural purposes. It usually must be adjacent to a village, as has been clearly indicated in preceding chapters, but so located that it may become a real rural school, teaching in terms of rural life and giving opportunities for vocational education in rural occupations to boys and girls of twelve to eighteen years of age. It is no longer merely a city school for country boys with city textbooks, courses of study, and city methods. The trading-centre people working with and for the country can and should be educated with those with whom they are to live and co-operate.

A Tennessee Consolidated-School Site.—An excellent example of a consolidated school with an ideal site put to good use is the Farragut School of Concord, Tennessee. It is in the open country, a mile from the nearest village.

II. THE BUILDING AND ITS SITE

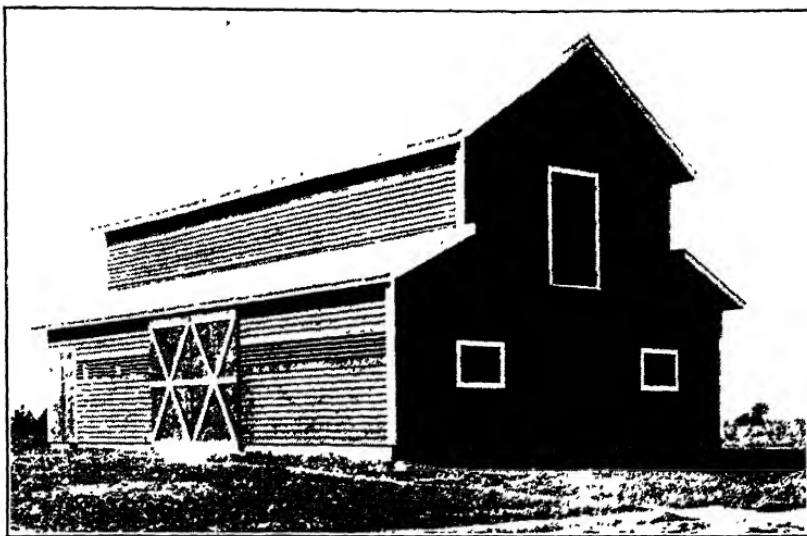
The Farragut School.—The building is a two-story brick structure with basement, and cost, with the original equipment, \$12,000. Additional equipment and a water system installed since have brought the total cost of the school up to about \$17,000. The high-school department occupies the second floor, one large room on the first floor, and part of the basement. Three other rooms on the first floor are occupied by the elementary school. The household-economics room, the girls' lunch and toilet rooms occupy one-half of the basement. The manual-training room, the boys' lunch and toilet rooms occupy the other half. On the second floor nearly one-half of the space is occupied by a study hall, in which all high-school pupils are assigned desks. There is space for additional seats whenever it is desirable to use the room as an auditorium or assembly-hall. When properly arranged as an assembly-hall, it will seat 300 persons. The remainder of the second floor is divided into a

hallway and three rooms—two recitation-rooms and a library.

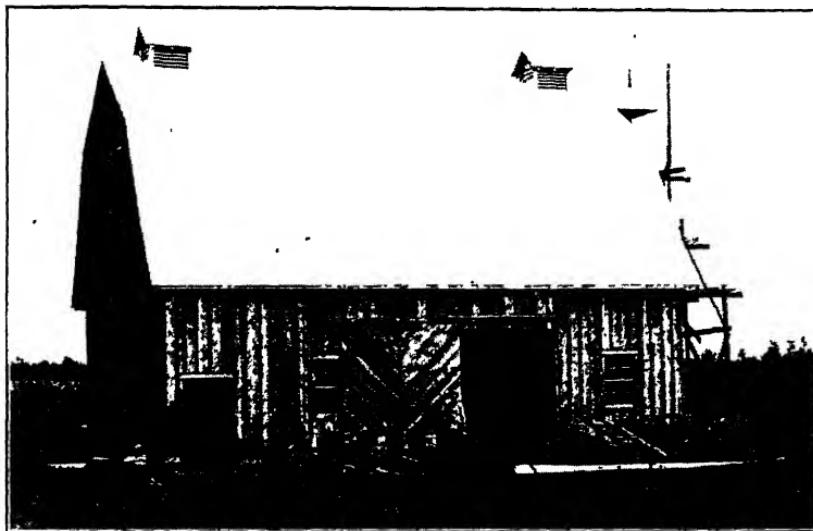
On the school grounds is located a cottage for the principal, the use of which is given to him rent free. The building is plain and simple, but well arranged and adequate for the purpose for which it was built. It is equipped with a complete bathroom, private toilet for servant, and a "cool room," with concrete sink, through which water is kept running in warm weather. This serves as a refrigerator. The cost of this cottage was very small, as the main part of the cottage consists of one of the abandoned schoolhouses of the district moved here and remodelled.

At the junction of the Kingston Pike and the Concord Pike, at the corner of the school grounds, a concrete water-box for horses and a public drinking-fountain with concrete bowl and base for people have been erected. The fountain has proved to be of great convenience, not only to the community but also to travellers on the pike. The money for the water-box and fountain was subscribed by the pupils, teachers, and patrons of the school. Every pupil subscribed, and has therefore a feeling of ownership. As much of the work as possible was done by the high-school boys in the manual-training classes. On the water-box, in brass letters, are these words: *Erected by the Farragut School and Community, 1910.* On the fountain are the words: *Farragut Drinking Fountain.*

In addition to the school building and the principal's home, situated on the school grounds, there are a barn and a chicken-house. The school owns a brood mare and several Percheron colts; it also owns a flock of pure-bred Plymouth Rock chickens. The mare, colts, and the chickens are the only animals owned by the school, and are used for teaching the principles of breeding and for other instructional purposes. The chicken-house is fitted with good, substantial equipment, including trap-nests, so that it is possible to keep a careful record of the number of eggs laid by each



A model barn in North Carolina



A model barn at a country-life school

hen. The principles of selection and breeding, which may be demonstrated so easily with poultry, apply with equal force to all kinds of animals.

The School Grounds.—In addition to the 12 acres which the school owns, it has leased for a period of years 8 acres adjoining its property.

The lot owned by the school is divided into two parts; 6 acres about the buildings are in permanent grass for playgrounds; the other 6 acres are used for demonstration purposes. The school employs one man by the year to serve both as janitor and farm laborer. The grass-plat immediately surrounding the buildings has been beautified by the addition of shrubbery and flower-beds. Part of it is laid out for a baseball-field, for tennis courts, and for an out door basket-ball court. These playgrounds are used by the community at any time, and their use constitutes one of the principal contributions of the school to the community.

Demonstration Plats.—The chief aim in the demonstration work has been to show the farmer and the pupils in the agricultural courses how to bring the soil from a state of low fertility to a state of high fertility in the shortest possible time. The plats are used for demonstration and not for experimental purposes. One demonstration of particular interest is conducted on a half-acre of land divided into 40 plats. The half-acre is divided first into four ranges. Each range is divided lengthwise into two parts. One-half of each has had an application of two tons of ground limestone per acre. On these ranges are conducted a rotation and a fertilizer demonstration, planned to show side by side the four phases of a four-year rotation. The following is a description by the principal:

In the summer of 1913 range A has rye ploughed under for cow-peas. Range B is in wheat, seeded with clover and timothy. Range C is in clover and timothy. Range D is in corn. The cow-peas of range A will be turned under for wheat in the fall. Thus the crops follow one another in regular succession, each range bearing the same crop once

in four years. The ranges are divided crosswise into 10 parts of one-eighthieth of an acre each. Plats 5 and 6 receive no fertilizer and serve as checks. Each of the other 8 plats has a different application of fertilizer. From this demonstration the students and people of the community are learning two very important lessons: First, that the soil is very poor in nitrogen, and that the quickest and most economical way to increase the nitrogen supply to the soil is to grow and turn under large crops of leguminous plants, such as vetch, cow-peas, and soy-beans, which gather and convert into plant food the free nitrogen of the air. The second lesson is the value of an application of ground limestone. The difference between the limed and unlimed sections of the ranges is very apparent at any time during the growing season and is also apparent at the time of harvest. Many farmers in the community have profited by the lessons; some have not. The great value of rotation demonstration is that the demonstration keeps going on and on. It tells its story each year. The story is more impressive each succeeding year. The lesson becomes plainer and more valuable as the time goes by.

Another part of the 6 acres is used as a model garden. It is known in the community as the "principal's garden." The rest of the land is used for general crops, particularly to furnish fodder for the horse, colts, and poultry. The model garden and the use made of the rented land are described by the principal as follows:

The most important field on the farm is the home garden. The principal's garden consists of one acre of land enclosed by a woven-wire fence. It is planned as a model for the busy farmer who must do as much of his work as possible with a horse. Everything is in rows far enough apart for the one-horse cultivator. All of the common vegetables and small fruits are planned for. Here intensive tillage, crop rotation, the use of fertilizers and stable manure, and the ploughing under of leguminous cover crops are all practised to a great extent.

Four acres of the rented land have been divided into one-acre plats, upon which is to be carried on a four-year crop-rotation demonstration. The idea in this is that not only shall the plats be large enough to be cultivated with two-horse implements, like the fields of a farm, but that there shall be measured equal tracts which may be used as a basis to compare the results at the school with the results obtained by the boys in the agricultural course who are members of the boys' corn club and with those of farmers in the community who are carry-

ing on co-operative demonstrations. The other four acres of rented land will be devoted to pasture demonstrations. One-half of the field will be seeded for permanent pasture. The other half will be used to show how, by proper selection of cereals, clovers, and grasses, good pasture may be obtained for nearly all seasons of the year.

Community Service.—The Farragut School means more to the community than the ordinary school which confines its attention to instructing the boys and girls who come to it as pupils. It is attempting to be an institution of the widest use and of direct value to every man, woman, and child in the community. The following are some of the ways in which the school is serving the community:

On the last Friday night before each full moon there have been held at the schoolhouse, for the past eight years, meetings called "moonlight socials." These are community gatherings to which all are welcome. The programme varies from meeting to meeting. There is always a liberal allowance of music and usually a talk on a subject of general interest pertaining to some phase of farm and home life. Sometimes the talks are given by outside persons, from the State Agricultural College or elsewhere. More often, however, there is a general discussion of a selected subject, led by a few members of the community selected before the meeting. If the subject to be discussed deals with technical phases of agriculture in which they are not interested, the women will meet in another room and discuss some problem of housekeeping. The discussions are made as practical as possible. After the regular programme is over the evening is given to general sociability, playing games, and singing familiar songs. Usually some sort of lunch is served. The domestic-science room has facilities which make the serving of a lunch very easy. The meetings are well attended and have become a very important part of the community life. Other evening meetings are held in the schoolhouse on many special occasions. If the people of the community desire to get together for any purpose, the schoolhouse is always designated as the place of meeting.

The biggest meeting of the year, however, is on Commencement Day. The programme lasts all day. In the forenoon the graduating exercises take place, with essays or short talks by members of the graduating class. These essays and talks are usually upon subjects pertaining to farm and country life, and are therefore of more interest to the audience than the ordinary high-school graduation essay or oration. At this forenoon meeting the graduates receive their diplomas. At noon a basket-dinner is served on the grounds under the large shade trees. The food contributed by each family is put in a common lot and served as a community dinner. The domestic-science room is utilized to make the lunch more complete. This plan helps make the lunch hour a real social hour. After dinner the visitors inspect the plat demonstrations in rotation of crops, and the progress of the various crops under the different treatments is noted. The features of the demonstration are explained by the principal of the school. At two o'clock the people assemble in the school, and there is a commencement address, usually by some prominent outside speaker. Following this is a baseball game between the high-school team and either a team from some other school or a selected team from among the farmers of the community. In the evening a drama is presented by the students of the school. This part of the programme creates great interest and is always well attended.

Another service of the school is in furnishing agricultural reading for the farmers and their wives in the community. The school library contains about 200 books and a large number of government reports. It also contains about 4,000 bulletins from various experiment stations in the United States. There is an abundance of valuable reading in these bulletins which is not ordinarily available for farmers, because they have no way of determining where the most valuable material is to be found. This school has been very successful in its attempts to overcome this difficulty. One teacher of the school examines all bulletins re-

ceived. He notes particularly what in the bulletins is of value to the farmers and housekeepers in the territory served by the school. He therefore not only has information on the particular subject discussed by the bulletins but also is able to put into the hands of the people of his community the material which will be of most value to them. All the bulletins and books of the library are constantly in circulation in the community and are available for young and old people alike. The school building is open on Wednesdays and Saturdays throughout the summer vacation for those who care to visit the library to consult the books and bulletins in the library or to get books, reports, bulletins, or periodicals for home reading.

During the vacations the school playgrounds are used freely by people in the district. They are, in fact, community playgrounds, on which the boys gather for baseball and other games whenever their duties permit. The tennis-courts and basket-ball courts are in considerable demand. The school and its property are regarded by the individuals of the community as belonging to them, and they are welcome at all times to make any use of them which does not work injury to the school. On days during the summer vacation on which the school library is open the shower-baths are also open and many visitors use them.

The school grounds and demonstration plats are open to inspection at all times, and farmers driving by frequently stop to examine the crops. Many of them visit the plats at regular periods and study carefully their progress.

Another important community service comes through the outside activities of the principal of the school. He has become an expert adviser in agriculture to all the farmers of the community. He is employed throughout the year, and a horse is furnished him. When school is not in session he spends much of his time in driving about the community, visiting the farmers on their farms, and getting in touch with local agricultural conditions and problems. This en-

ables him to know well the agricultural conditions of the community, to adapt the work of the school to the needs of the community as he finds them, to bring to each farmer expert advice for his own particular needs, and to give to all information in regard to the best things done by any. It also enables him to keep in touch with the boys' corn-club work and other agricultural work, and to see that in their practical work on the farm they apply the principles learned in school.

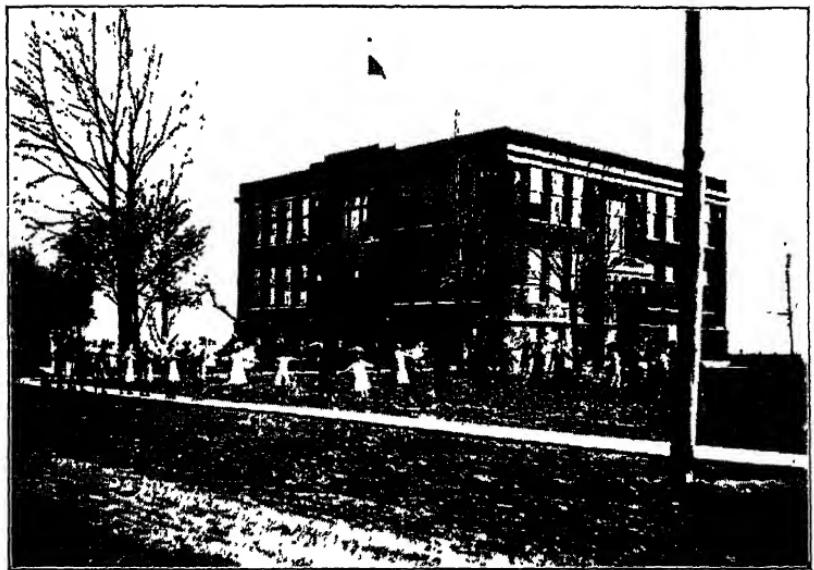
III. WAKE COUNTY (N. C.) SCHOOL-FARM MOVEMENT

Another Example.—A unique plan for the use of the school site was developed five years ago in Wake County, North Carolina, under the leadership of Z. V. Judd, then county superintendent of public instruction. The plan is called the "School-Farm Movement," and comprehends the establishment of a small farm of from two to ten acres in connection with every country school. This farm is cultivated by the children and their parents, working together on certain days in what Mr. Judd terms "school-farm working bees." The working bees are gatherings for social purposes, as well as for the cultivation of the school land. Each school-farm is usually given to one crop. A regular system of rotation is planned. The agricultural work is done under the supervision of the best farmer in the community, so that good methods are used. Every person, therefore, taking part is given the opportunity to observe the most successful systems of raising the crops under cultivation. The income received from the sale of the products raised on the school-farm is used for general school purposes.

It is hoped by this movement to accomplish three things: first, to make money to be used in supplementing the school fund; second, to offer an opportunity to make the teaching of agriculture in the rural school entirely practical and to illustrate how pleasant farm work can be made



Play at a consolidated school, Preble County, Ohio



Supervised play at a consolidated school in Marion County, Ohio

under proper conditions; and, third, to offer rural communities opportunities for gatherings to develop the social side of farm life, with the schoolhouse the social centre of the community and the principal occupation of the people, farming, the centre of interest.

The first work was done at Holly Springs, where seven years ago two acres of land were planted in cotton. The lighter work was done by the women and children. A community dinner was a part of the programme for each gathering. Two bales of cotton were raised, netting the school \$119. The next year the plan was tried at eleven schools, the crops raised including cotton, corn, tobacco, and wheat. On the eleven farms 1,200 persons participated in the work. The net profit was nearly \$1,200. The next year six additional farms were established, making a total of seventeen farms.

The children of the county want these school-farms, and the older people are in sympathy with the idea. The results have been an increased interest in the schools and the school work, an improvement in the appearance of the buildings and grounds, and the lengthening of the school year; also the development of a better community spirit and an improvement in general farming in the county.

Information concerning the Wake County plan has spread to all parts of the country and it has been adopted in many other places.

Character of the Site.—The site of the Farragut School was well selected. The country is rolling, the school building and principal's cottage stand on an elevation 25 or 30 feet higher than the roadway, 100 feet in front. The entire 20 acres have good natural drainage. The elevation is not high enough to be too exposed to winter winds. The soil is a sandy loam with fertility enough to make cultivation profitable. The principal's garden and the demonstration plats are in an excellent state of cultivation. The site, in a word, includes all the essentials that the desirable school

site in the country district should include. Its location at the crossroads of two main pikes makes it accessible from four directions.

If the site of the building were not perfectly drained by natural drainage, considerable expense would have been necessary to lay tiles. It would be exceedingly unwise to build a structure of the size of the building needed for a consolidated school with from four to a dozen classrooms without substantial foundations, and such cannot be had except with good drainage, natural or otherwise.

Water-Supply.—The Farragut School has an excellent water-supply, although the cost was greater than is ordinarily necessary, if available water is considered in the selection of the site. The new system was installed in 1911 at a cost of \$3,000 after well-water had been used for seven years. Water is taken from a spring 1,200 feet away from and below the school building. It is pumped to the building and into two 1,000-gallon tanks in the attic by a No. 40 double-acting Rife ram, with a capacity of 3,600 gallons per day. The ram is driven by creek-water, but delivers only spring-water to the buildings. From the tanks, water is conveyed to all parts of the school building, to the principal's house, the barn, and to the drinking-fountain on the pike. In the hall on the second floor are two sanitary drinking-fountains for the high school. On the lower floor there are two more for the elementary school. There is a drinking-fountain in each lunch-room. There are two sinks and one wash-bowl in the domestic-economy room, one wash-bowl in the manual-training room, and three sinks in the science laboratory.

Each toilet-room is equipped with six Douglas-siphon-jet closets, two wash-bowls, two plate-glass mirrors, and two shower-baths with dressing-rooms. All sinks and wash-bowls are furnished with liquid-soap dispensers and paper towels. The partitions between the closets are galvanized iron painted with white enamel. The girls' shower-baths are enclosed with white enamelled iron; the boys' shower-

baths with white enamelled wood. The walls of the basement are all painted white. The floor is of concrete. All sinks, bowls, and showers are supplied with hot water, the former from a 300-gallon hot-water tank connected with a coil in the furnace and also with a special tank-heater, with a capacity of 250 gallons per hour, to be used when there is no fire in the furnace.

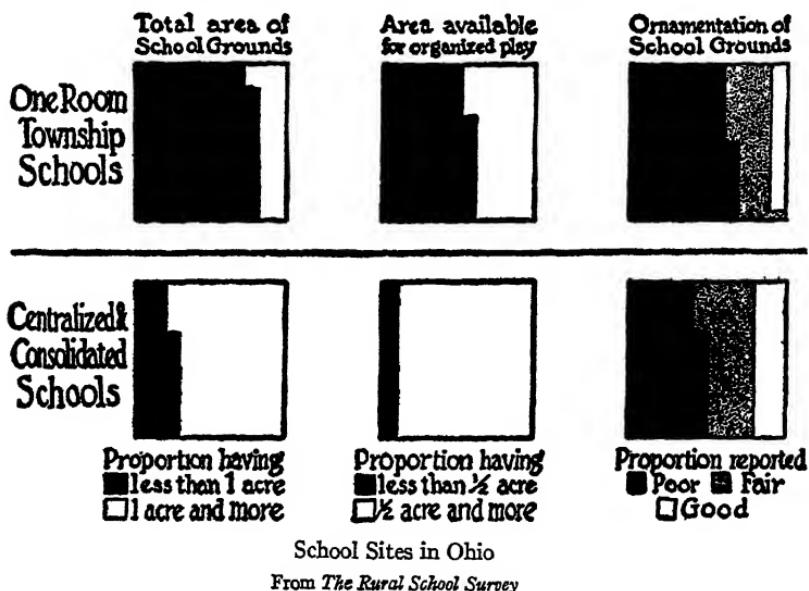
If a site as good otherwise could have been found with water available by digging or driving a well, the water-supply would have been secured at a less expense. The driven well is as a rule very satisfactory, and for storage and pressure the pneumatic tank is more satisfactory than the tank in the attic or cupola.

IV. FACTORS IN THE SELECTION OF THE SCHOOL SITE

Many of the most important factors in the selection of the school site are discussed above in the description of the Farragut School. One consideration not mentioned is in regard to the surroundings. Particular care should be taken to see that the school is not located adjacent to ill-smelling places, such as stables, nor near noisy disturbances, such as cattle-yards and railroads. Not only is the noise of passing trains distracting but there is danger, particularly during play hours, of children in their games running upon the tracks and, because of the noise and excitement of the play, not hearing approaching trains.

The Playground.—The need of a good playground cannot be overemphasized. It has been generally assumed in the past that for the country school no playground need be provided, because country boys and girls do not need to play, as they have plenty of physical exercise in their home work. This shows no real conception of the value of play. Its chief value is its socializing effect and the pleasure that it gives. Both are especially needed in the life of the country boy and girl.

Farming in the past has been an individualistic life; the farmer's most prominent characteristic has been individualism. Most games teach team-work and co-operation. Such things learned in play in early life become in later life a factor in work and living. Besides, co-operative play



teaches the proper attitude toward fellow players and workers; it develops grace and suppleness, it quickens the wits, and it creates a joy in living.

The school site should be of ample size so that good playgrounds may be provided. There should be separate sections for the younger children, the older boys, and the older girls. There should be a space large enough for a baseball-field, so that baseball may be played without danger to the little children. There should be space for basket-ball and volley-ball for both boys and girls, and other space for playground apparatus, such as swings, seesaws, sand-boxes, etc., for the smaller children. Altogether, at least five

acres should be provided for playgrounds for the consolidated school with 200 to 300 children of from 6 to 18 years of age.

On the days when the school is in session the playgrounds should be for the exclusive use of the pupils. In the evenings, on Saturdays, and during vacations they should be open to the boys and girls of the entire district. In fact, special efforts should be made to encourage the young men and older farm boys to meet upon the school ball-field for baseball and athletic contests as often as possible. It not only is of benefit to those making such use of the grounds but it is of direct value to the school in keeping it prominently before the people. When the people of a country district use the school grounds for all kinds of assemblies, baseball games, community picnics, farmers' conferences, etc., the school becomes an institution of greater importance, and as a result receives better support both moral and financial than it does otherwise.

SUMMARY

1. The site should be dry with natural drainage if possible, preferably gravel or sandy-loam soil, but should be near a source of supply of water for drinking and other purposes.
2. The site should contain from 10 to 25 acres of land for the school building and surrounding lawns, the principal's cottage, playgrounds, demonstration plats for teaching agriculture, the principal's garden, and the farm.
3. The buildings should be placed away from unpleasant and undesirable surroundings, such as ill-smelling barnyards and noisy traffic, either on the railroad or highway.
4. The playground should be ample in size so that separate parts can be assigned to the younger and to the older children. Baseball-fields, basket-ball and volley-ball courts, tennis-courts, etc., should be provided. The playgrounds should be used by all residents of the community, as much as possible, when school is not in session.
5. The demonstration plats should be conducted to show the boys studying agriculture and the farmers of the district the value of

scientific cultivation, of various kinds of treatment of soils, of different fertilizers, and of new varieties of farm plants.

6. The principal's garden and the farm should be conducted as nearly as a model as possible. In order that this may be done the principal should be a man with agricultural training; he should be employed for twelve months in the year; and should be furnished a cottage, rent free, in which to live.

PROBLEMS IN APPLICATION

1. What requisites of a good school site are discussed in Dresslar's "Rural Schoolhouses and Grounds," a bulletin of the U. S. Bureau of Education?
2. Note the requirements of a school site as given in Ayres and Wood's "Healthful Schools." Houghton Mifflin Co.
3. Judge the site of some available school site by the standards suggested. Criticise the plan for a complete school plant given in the last chapter.
4. Would it be possible to rate a consolidated-school site on a score-card as buildings can now be rated, each point receiving a score and the combined scores being the rating?
5. How can a school site in your home State best be beautified?
6. What suggestions for landscaping a school site are made in bulletin form by your State department of education?
7. What suggestions along these lines are made by Dresslar in his bulletin mentioned above?
8. Describe some noteworthy school-site adornment, as given by Kern in his "Among Rural Schools" (Ginn), by King of the University of Iowa in his bulletin on "Hygienic Conditions in Iowa Schools," or some other writer of a book or report.
9. What do the school surveys usually find regarding the size, character, equipment, and adornment of school sites (e. g., the Ohio School Survey)?
10. What can pupils and parents be led to do voluntarily for school-site improvement?

BIBLIOGRAPHY

1. Dresslar—"Rural Schoolhouses and Grounds." U. S. Government Printing Office.
2. Challman—"The Rural-School Plant." Bruce Publishing Co.
3. Rapeer—"Standardizing the Rural-School Plant." *School and Society* for Feb. 13, 1915.

4. ——— "Rural-School Hygiene," a survey. (Section of the Pennsylvania Rural-School Survey, published by the editor.)
5. Ayres, Williams, and Wood—"Healthful Schools." Houghton Mifflin Co.
6. Dresslar—"School Hygiene." Macmillan.
7. Rapeer—"Educational Hygiene." Scribner.
8. Kern—"Among Country Schools." Ginn.
9. Arbor-day and special bulletins on improvement of school grounds, the school farm, the school manse, etc.
10. See the *American School Board Journal* (Milwaukee, Wis.) and the *American Journal of School Hygiene* (Worcester, Mass.) for occasional suggestions on sites. The State departments of education of a number of States issue bulletins dealing with the school site.

Contrasting Consolidated and City Buildings.—The differences in purposes and conditions between the city and the consolidated school are worth noticing. Frequently overlooked, some of these distinctions which must be kept in mind may be summarized as follows:

1. *Land* is more plentiful and available in the open country or adjacent to a village trading centre. The building may spread out more and thus obviate the necessity of second and third floors and basements with their greater cost, needless stair-climbing, and sanitary and educational disadvantages. A one-story building with no basement and no part below ground is possible in the country and is educationally much to be desired. The city school is more or less of a monstrosity because it has had to adapt itself to too small a site.

2. The building must provide for growth and *extensions*. The unit building plan must be utilized and plans for growth to the fullest consolidated size must be made at the outset. The one-story building makes these extensions rather simple. A two or three story building complete at erection is an architectural bar to building growth. The consolidated school of the future will probably be but one story in height.

3. The rural-school building is commonly without *fire-fighting* departments within easy call, such as the city provides, and must thus be constructed with particular adaptations to the fire hazards. Two school buildings are now burning each day of the year. In the Collinwood fire, in a typical two-story building, one hundred and seventy-three children burned to death in a few minutes. The one-story plan is desirable here and this should be as completely fire-proof and panic-proof as possible. One row of rooms with a corridor about a large open space, and constructed largely of concrete, gives a good type of fireproof building.

4. No *city-water or lighting* systems for the building will usually be available in the country and these will have to be supplied within the building itself as independent systems.

5. *Transportation* for a number of children in school-owned automobiles or other vehicles and in private vehicles of all kinds will, in the complete consolidated plant, be in operation. The building should be adapted to the loading and unloading of children in such a way as to prevent exposure to rain, snow, and cold winds. Some have suggested that the building should be constructed with an arcade in order that the vehicles might drive right through the building; but usually a driveway covered with a wide porch on a protected side, probably the south or east, will be sufficient. Buildings for storing the vehicles and any horses or other animals used will also be necessary.

6. Modern country life is based on *science*, largely agricultural science and home science. Applied botany, zoology, chemistry, and physics will be central subjects. These subjects require proper laboratories, beginning for the pupils at least with the fifth or sixth grade. These rooms require more than ordinary planning to meet country conditions. The old classroom in which country children were persecuted with studies such as Latin, Greek, German, French, algebra, and geometry will not be much in evidence. The rooms must be adapted and equipped for helping country people solve country problems.

7. The consolidated building *serves more functions* for the community than the city building. There is practically no institution frequently to compete with it.

8. The city has many places for recreation and *social meeting*. The consolidated school is the only centre to which the whole community may turn for community-centre activities. The churches are for sections of the people; the school is for all. The auditorium is central in such a building.

9. Similarly, the city has fine public *libraries* and many easily accessible opportunities for reading. The consolidated-school library for the entire community within the transportation area is essential. Such a room requires careful planning.

10. The consolidated school is about the only *public building* in the open country. It should be attractive and dignified, in keeping with its high educational and social purposes. Beautiful grounds and suitable architecture are essential for this central civic institution. This does not mean high steeples, Grecian columns, and "gingerbread" decorations. Most rural-school buildings are hideous. It does mean simple beauty and appropriateness.

11. In the city the *high school*, except at Gary, Indiana, and a few other cities, is *separated from the elementary schools*. Some cities have also separate buildings for the intermediate and junior high-school grades, sixth to ninth, or other combination. Manual training and domestic science are frequently given at central points in the city but not at every school. Pupils frequently have to go some distance to their athletic fields or school gardens. In the country, however, all these features can and should be combined in one school plant. High-school and elementary-school pupils are housed in the same building. All other features are concentrated, consolidated. The laboratories, library, shops, and grounds can be used early in the elementary school as they are in the Gary system. The auditorium will be used by all for all. Each group can help the other. The school life of the child may be kept continuous rather than disparate. Everything must be adapted to this wider use. Along this line the consolidated school has a unique opportunity to work out experimentally a superior type of education for our democracy. The Gary plan and school plants may be studied with profit by consolidated-school leaders. Being in the city, so far, the Gary type of building is of two or more stories, but there are many features used by all the children.

12. The school should be an *object-lesson* in its water, lighting, and toilet systems, and in its landscaping and other features. A pressure-tank, force-pump, gas-engine, or electric motor, flush toilets, independent lighting system, and

other modern features that should be installed on our farms, frequently go out from the consolidated school to the homesteads by the contagion of example. In the city these things are taken as a matter of course, in the home and in the school.

13. In the city, too, the building must frequently be *located* without reference to light, noise, wind directions, etc., because of the small size and shape of the building lot available. In the country the long outsides of the classrooms can be made to face the east and the west and thus obtain desirable sunlight and other factors and avoid the disadvantages of north and south exposure. In the South and the tropics the classrooms can be placed broadside toward the prevailing winds, such as the trade wind in the West Indies. Overhead lighting helps solve this problem.

14. The consolidated school is a *year-round plant* for at least the younger children and the principal and his family. The building must be adapted to summer uses and must be built with the thought in mind that it is always to be under the watchful eye of the principal of the school. In foreign countries it is quite common for the home of the principal to be in the school building, a custom growing out of boarding-school times and a wider use of the principal as a community secretary and leader. The one-story building with a single row of classrooms flanked by a corridor meets summer conditions admirably because it is so open to the breeze. Care must be taken not to get the auditorium too much closed about by classrooms, although this may be necessary in cities.

15. The building must be as *inexpensive* financially as possible. Our distribution and apportionment of the benefits of taxation are still so unequal and unjust that the locality has frequently to bear more than it should of the financial burden. Consequently, money comes hard and must reach as far as possible. High roofs and fancy decorations may well give way to more room for library,

auditorium, laboratories, teachers' retiring-rooms, etc. The flat roof with some overhead lighting, not omitting plenty of window ventilation, may well become typical of the country school—a low, flat building it would seem to many until they were used to it and had been on the inside and seen its educational advantages. However, financial sacrifice on the part of a community, with some county and State aid in putting up a first-class building, completely fireproof and thoroughly adapted to rural-life needs, is one as worthy as any to be made in this life. Many communities are making noble sacrifices and are reaping almost immediately the full rewards of such sacrifices.

16. One further difference may be noted in closing. The consolidated school with possibly but one row of classrooms and a corridor, or even with two and a corridor between, may have bilateral or trilateral and overhead lighting, and thus have desirably wider and shorter classrooms. The unilateral-lighting fad has made schoolrooms too long and narrow for the best teaching.

II. GENERAL STANDARDS APPLIED

Thus the consolidated rural-school building is unique and in a class of its own, requiring its own architecture and adaptations. Certain great standards that govern all schools should be applied, but in the main it is an original conformity to new conditions and needs. The opportunity for careful experimentation and climatic and other adaptations is before us in this era of reconstruction. Great opportunities for American inventive genius are bound up in the consolidated-school building.

The details of consolidated-schoolhouse construction cannot be entered into in this volume. The theme is one fit for a volume by itself. The writer has dealt with the matter at greater length elsewhere.¹ Challman has dealt

¹In "Educational Hygiene," Scribner's Sons. See also the last chapter in this volume.

briefly with the matter in his volume on "The Rural-School Plant" and in bulletins of the State Department of Public Instruction of Minnesota. "Healthful Schools," by Ayres, Williams, and Wood, and Dresslar's "Rural Schoolhouses and Grounds" and "School Hygiene" are suggestive. Betts and Hall's "Better Rural Schools" deals with the building problem. Most valuable are the actual schools that progressive leaders and communities are constructing, such as the Sargent and the Jordan schools described in this volume. The various plans of one-story and other buildings appearing almost monthly in the *School Board Journal* and the plans to be published in the large bulletin on rural-school consolidation by the Bureau of Education will prove helpful. Some of the advantages of the one-story type of building are given in our final chapter.

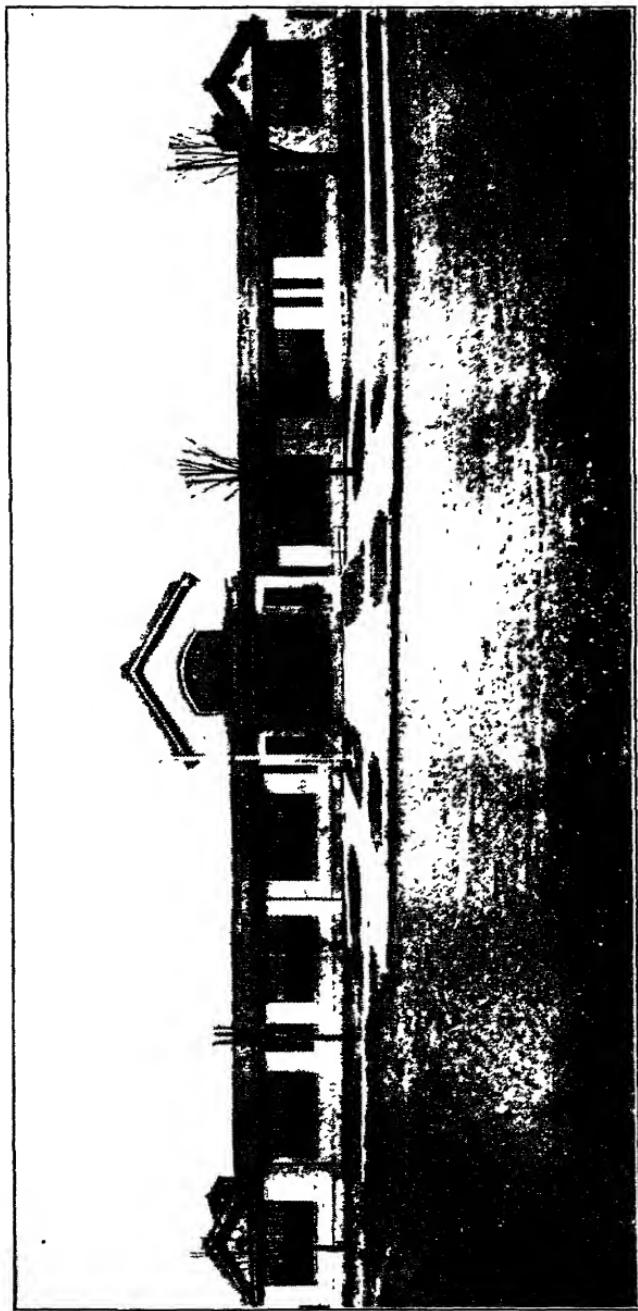
Lighting and Orientation.—The whole problem of ventilation is as yet unsolved. Present scientific investigation has about proved that the important factors in good and bad ventilation are not the chemical composition of the air—relative amounts of oxygen, carbon dioxide, and organic matters—so much as its relative condition as regards movement of the air, temperature, and humidity. Other factors, such as relative amount of exercise of the occupants of a room, their physical condition, and clothing and bathing, enter in. Ventilation affects the heat-regulating mechanism of the skin rather than the lungs. Respiration and ventilation must be kept separate. Since windows are also wind-ows for wind as well as light to enter, the problem of lighting is inextricably bound up with ventilation, except in those as yet largely non-existent schools where a good fan system of ventilation is in operation every day of the school year.

To avoid the shadows of the little fists of right-handed pupils on their writing, and for other reasons, we have as a standard to-day that at least most of the light of a classroom should enter from the left of the pupils as seated. Many schools have all the light of a room enter from the

left and a number of educators have by various administrative and publicity devices enforced the standard. But they tend to overlook the ventilation function of windows, or assume that "the fans will be running all the year," or that sufficient movement of air is produced by opening windows on but one side of a room. Both assumptions are practically universally contrary to fact, and this strict unilateral-lighting fad has done much harm, not only in the tropics where Northern schools are copied but everywhere in our own country. The writer has dealt with the problem more at length in "The Case Against Unilateral Lighting" in the *School Board Journal* (Milwaukee, Wisconsin) for July, 1918, and "Summer School Sanitation" in *The American Journal of School Hygiene* (Worcester, Massachusetts) for June, 1918. The ventilation problem was dealt with under the title of "Changing Standards of Schoolhouse Ventilation" in the first-named journal for April, 1919.

In order to give each regular classroom of the typical elementary school size (about 24 to 25 by 30 to 32) the advantages of largely left-hand lighting and east or west sunshine, the typical building is coming to be one with the longer axis running north and south with a corridor between the two rows of rooms. In the West, but one row of rooms with a long porch is a type. For hot climates the writer has advocated one or two rows of classrooms, end to end, covered by a single roof and flanked by porches on *both* sides and the whole at right angles to the prevailing winds. A single row of rooms is better than two rows with a hall between, for several reasons.

High windows on the rear and right of the pupils we believe are also desirable. These windows, about the size of the upper sashes on the left, are desirable for ventilation if not for light. Where there is a central corridor it will be very much better lighted by this system than by the unilateral-lighting plan. Of course the system provides cross-ventilation, the only kind possible much of the time, the



Courtesy of Wilson Vernon, architect

A one-story building erected at Aberdeen, Washington

The extensions for new classrooms to any desired number may be made to the rear from either end. The auditorium extends back from the middle front. The consolidated building may well be two to four rooms shorter on the front, and all rooms, on the two end extensions lighted from east or west and overhead as well as from the inside corridors.

breeze going entirely through the building across the corridor. No injurious cross-lights or shadows are to be anticipated by this plan. As suggested above and later, the classroom may be wider and shorter than the above dimensions and partly lighted from above.

The windows on the left of the pupils should extend from about the level of the pupils' eyes entirely to the ceiling. A twelve to thirteen foot ceiling is high enough. These windows, five or six in number usually, should have as little space between them as possible and should extend from about six feet from the front of the classroom entirely to the rear of the room, and practically as a single window. Steel mullions instead of brick piers between the windows are best for this purpose. In some schools a large third sash or transom is used to get a full-length window. The sashes should usually be wide and with single panes of glass. The steel window is being widely used to-day.

The single-sash windows on the rear and right may be about as close together as those on the left. If they are put on hinges at the rear (if opening to the outer air instead of into another classroom or cloak-room) and if those on the right are on pivots, top and bottom, these windows may be easily managed even if above the blackboard level, as they should be. In very hot climates or in rooms used for summer classes, ventilators which admit air but not light (horizontal boards set at an angle near together) may well be put in for ventilation, even in the front of the room.

Overhead lighting may be utilized to good advantage in all one-story schools, but should not lead to fewer or closed windows on the sides, because this cuts down opportunity for natural ventilation, the only economical and practicable kind during warm weather.

Shades.—The best shades are poor indeed. They frequently obstruct both light and air. The ordinary dark-green shade, which has become so common because of the theory that "green is good for the eyes," has ruined more

eyes than it has helped, by making rooms dark and cave-like when pulled over the window in order to cut off the blinding rays of the sun. This color should practically never be used except for stereopticon purposes. Light tan is a much better color. The shade should be translucent, letting in plenty of light but toning down the intensity of direct rays. Cloth shades are probably the best for schools. The folding-shade has the disadvantage of cutting out light if pulled to the top of the window, since it can be folded no narrower than about a foot to eighteen inches in width. The roller cloth shade with the roller hanging by a single cord from the middle top of the window is good. The roller cloth shade with the roller attached at the ends to a cross-stick and this attached by a cord to the middle top of the window is the best the writer has seen for combining a number of advantages with the fewest disadvantages.

Various hanging slat devices, like Venetian blinds, which are supposed to admit plenty of gentle air-currents and sunlight and to keep out too much light, wind, and rain, are splendid in theory but usually poor in operation. Teachers must be trained and supervised continually to keep shades properly adjusted for the best light conditions in these book-reading school-days. Defects of vision increase in practically every school upward through the grades. It is time that this crime against childhood be stopped.

Workrooms, libraries, laboratories, auditoriums, and other rooms should have plenty of light and be governed by about the same principles, although the different seating arrangements may make north or south light satisfactory. Below-ground rooms should not be tolerated in such schools, not even two or three feet below the surface. If this is avoided the lighting problem will not be serious. In a one-story building the auditorium and gymnasium wing is usually two stories in height and semi-detached.

Ventilation and Heating Devices.—The consolidated school that deserves the name and is in a latitude where

considerable heat must be furnished during the winter has a central heating-plant—vapor, hot water, steam, or hot air. The first three require a separate ventilating device and air-ducts through which air is forced by a fan run by steam, gas, or electricity. The hot-air furnace alone should not be relied upon entirely in cold climates, since the air must be overheated and made too dry. Radiators must be used also. The fan system is by far the best ventilating system—fan ventilation and the temperature of the incoming air kept rather cool and stimulating and hot-water, vapor, or steam heating in classrooms. There is great danger of overheating the air in the fan-room, thus depriving it of moisture and the stimulation of coolness. Each system of this kind must have a thorough humidifying arrangement, its effect being to aid the body in eliminating excess heat.

The air-washing system by which the air after passing through the fan is forced through a small room in which there is a shower of water forced out of brass nozzles in a fine spray or mist is necessary for humidifying and cleaning the air. In such a building the outlet ducts should be connected with the inlet ducts to permit of recirculation of air when desired. The plan has not been tried out yet to any considerable extent, but where tried saves about half the coal, takes out odors of the air from classrooms, puts in moisture, and gives the three great essentials of ventilation: moisture (about 50 to 70 per cent of saturation which can easily be measured by a simple hair hygrometer), temperature (about 65 to 68 degrees, with above-stated humidity), and movement of the air (not drafts but perceptible motion). Changing temperatures are more stimulating than a steady one. Perkins suggests several modifications of the usual heating and ventilating arrangements for one-story schools. Vernon suggests others. Some schools have electric fans in the walls of each classroom, which force air through radiators into the rooms, under control of the teachers.

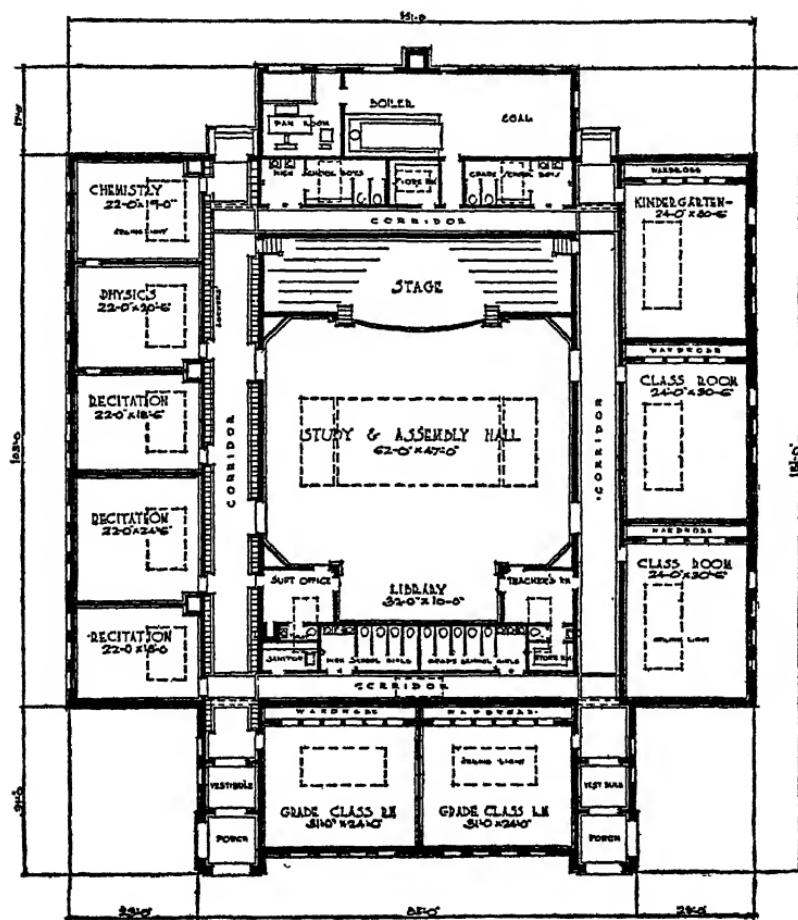
Some schools use jacketed stoves, but these have no place in a real consolidated school. Of course the consolidated school frequently has to go through a period of infancy in which the school is small because of incomplete consolidation of the district, a small but growing population, etc. In such cases these stoves may be used but are not recommended for even a two-room building. Where there is a furnace for a central system and several rooms, it should usually be placed in a detached fireproof building, not in a basement. The small heating-plant behind the school building is best. Of course a good janitor and man-of-all-work will be provided for a real consolidated school.

III. Rooms

The Classrooms.—The standard classrooms are the most important features of a school building and nothing should be permitted to interfere with them in planning the architecture. Frequently an architect plans the outside of a building with respect to appearances and then puts rooms into such a structure wherever he can. A better plan is to provide the desired number of standard classrooms and add such high-school rooms, auditorium, etc., as are desired, and then make the exterior as attractive as possible consistent with good taste. Standard essentials come first.

A very desirable form for the classroom is oblong with a cloak-room at the front end, behind the teacher's desk, where she may supervise it. The latter may be six to eight feet wide and have two doors entering the classroom, but none opening into the corridor or porch. Perkins has an interesting variation as shown in the accompanying plan with cloak-room at the rear. It leaves more blackboard space at the front. The size of the standard classroom is about 24 by 32; but if the right-hand and rear-lighting plan recommended here is used, the room may be much wider and need not be so long. In fact, for even interior classrooms with the usual twelve to fourteen foot hall where there will be no light

from the rear unless it be through high windows on both side walls of the cloak-room of another classroom, the room



Floor plan of Holly high and elementary school, Holly, Mich. For the consolidated school the editor recommends two spaces about the width of a classroom, or wider, between the two long corridors and the assembly-room, and wide, short classrooms. See his floor plan in the last chapter. Perkins, Fellows & Hamilton, architects, Chicago.

may be about square, say 27 by 27. This is an advantage, since most teachers divide the pupils of the classroom into

two sections, right and left; and the wider room makes each class group more compact and better to handle for recitation and for general management than three long rows of children on either side. A classroom seven rows of seats wide and six rows long is better than its opposite for most teachers and pupils. The personality of at least the ordinary teacher is of short range. The farthestmost "big boy" should be well within the magnetism of her personality. Overhead lighting plus the bilateral or trilateral lighting here advocated makes a very wide classroom possible. *In fact, the customary standard dimensions given above (24 by 32) may well be reversed for educational purposes*, and no less light, but more in most cases, for each pupil than in the "standard" unilateral-lighting plan be secured. What the best width is we do not attempt to say. We greatly need first-class experimental study, with easily modifiable rooms and types of porches, on these problems. See last chapter.

The seats may well be of the movable kind for many educational and hygienic reasons. Dresslar offers some good standards for seating in Monroe's "Cyclopedia of Education" (Macmillan). The writer inclines strongly to movable school furniture as opposed to the screwed-to-the-floor variety. The blackboards should be of slate and preferably four feet wide, low enough for the pupils and high enough for the teacher. They should extend around three sides of the room, front, between the cloak-room doors, right side, and rear. The ceilings should preferably be white and the walls light tan or cream color down to a level with the bottom of the blackboards, and dark tan or buff below. Other combinations that provide a light and cheerful room on even cloudy days are possible. The floor should be of hard non-splintering wood and double. If the building is of two floors, at least the second-story floor should be soundproofed with deadening quilt of some kind. No platform is needed in the modern democratic school. Hard chalk only should be allowed. A large window should light the cloak-room. Reference to some of the best books on

school hygiene should be made in planning the artificial lighting of schoolrooms. Not only the character of the light but the placing of the lights is important. In the high school, rooms of different sizes are desirable, and the cloak-room problem may be solved in another manner. One of the best ways is to provide a steel locker for each pupil.

Other rooms.—A complete consolidated school, one that has grown up or has been made a complete plant from the start, will have also a good farm-carpentry room, a forge and auto-repair room, nature-study and agriculture room, home-economics room and lunch-room, applied chemistry and physics laboratories, a library, an assembly-room and study hall, a gymnasium, a teachers' room for each sex, a principal's office, a medical supervision and retiring room, and suitable classrooms for art and other subjects that require special adaptation. A swimming pool has been found indispensable in rural consolidated schools of the west.

The toilet-rooms will, of course, be indoors unless water is absolutely unobtainable. Even then chemical closets are better than the abhorred outdoor privies. Few schools will be placed in such locations as to be without plenty of water. A good septic tank, or cesspool, with a force pump run by a motor of some kind, and a large pressure-tank easily make modern sanitary toilets in most regions possible. They must also be placed in farm homes if the latter are to be redeemed from constant medieval drudgery, and the school must lead and set the pace. The toilets should not be in basements. There should be no basements, remember. They should be well lighted and of the very best. A good book on school hygiene which covers this phase of sanitation acceptably, such as Dresslar's book by that name, should be consulted. Note the location of toilets in the accompanying plans and the last chapter. They are well placed for convenience, separation of the sexes, future extensions of the building, etc.

These rooms cannot be too well lighted and adapted to sanitary requirements. The number of stools and urinals

and their arrangement have all been worked out carefully and the best of modern help is none too good here. The old outdoor privy must be banished. It is only the incomplete, unfinished consolidated school that has this, and it is questionable whether the school deserves the reputation of a consolidated school with such pioneer inconveniences. The cost of first-class outdoor privies with concrete wells and septic tanks, such as are described in Dresslar's bulletin, "Rural Schoolhouses and Grounds," for both sexes is a considerable share of the cost of an indoor water-system. The principal disadvantage of constructing such outdoor buildings at the outset of consolidation, aside from sanitary ones, is that they tend to prevent the installation of proper and modern facilities when the building is enlarged.

Such privies, if found inescapable, should be models for those at the farms—absolutely flyproof, decent, comfortable, screened by vines and hedge or bushes, and protected from vandalism. Usually such buildings at single-room schools cultivate typhoid-spreading habits, since frequently no toilet-paper is furnished, and no warm water, no paper towels, and no soap are available to make cleanliness and sanitation habitual. The outdoor toilet is far below modern standards for even the single-room school and the best country homes. It certainly is entirely out of place at a consolidated school. The modern octuple presses of our city printing-plants which turn out a hundred thousand folded, complete newspapers an hour are not associated in the same building with the hand-press of Benjamin Franklin's time. Such presses as Franklin's are seen to-day only in museums. Yet at consolidated schools it is sometimes proposed to build outdoor toilets, even where a good water-system is easily available and there is no danger of pipes freezing at night. Up-to-date business scraps outgrown machinery and plans. The business of education in a democracy needs a large scrap-heap. Outdoor privies should be scrapped first. Septic tanks and, where neces-

sary, cesspools are as much beyond the outdoor privy as is the rotary beyond the hand-press. See reference 12.

The assembly-room is the centre of rural community life and of the consolidated school's activities. A school that does not come together daily, or at least two or three times a-week, is hardly a school. It is a collection of separate rooms of pupils and teachers that cannot well be moulded into an organized, common-group consciousness, with a strong spirit of loyalty, responsibility, and common purposes. A rural community that does not meet thus at least once a month is not a community. It is a largely individualistic collection of persons living in the same region, unorganized to a great extent and perhaps at variance with each other.

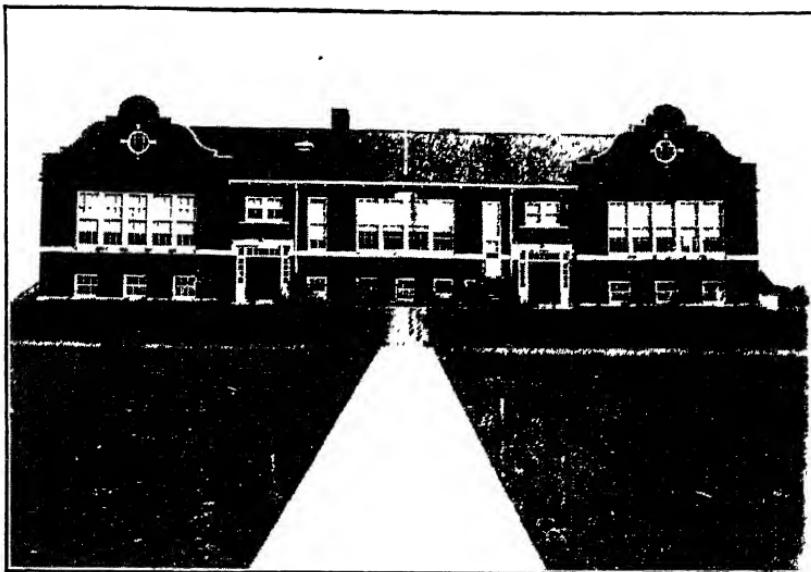
The Gary school system uses the auditorium all day long. In the Froebel and Emerson schools at Gary the auditorium is a fine theatre with a large stage in each, with motion-picture apparatus, etc., and used by different groups of pupils all the day and week. The uses of these auditoriums is described in the recent survey of the Gary schools by the General Education Board (New York) and in various bulletins and books on the Gary system. But the expense of such a room in the country is justified if it is used but three half-hours and one night a week. In a one-story building the auditorium can have a ceiling of any height and can thus extend well above the classrooms and secure light, ventilation, and assembly space. It should be thoroughly fireproof and easy of access both from without and within the building. For evening use it should be so arranged as to make possible freedom from interference with the classrooms, laboratories, etc. Usually the gymnasium may be in the same wing as the auditorium. It is hard to use a suitable auditorium as a gymnasium, yet it may be done where a sacrifice is necessary.

In many schools this room can be utilized as a study hall and in some cases as a lunch-room. In small buildings

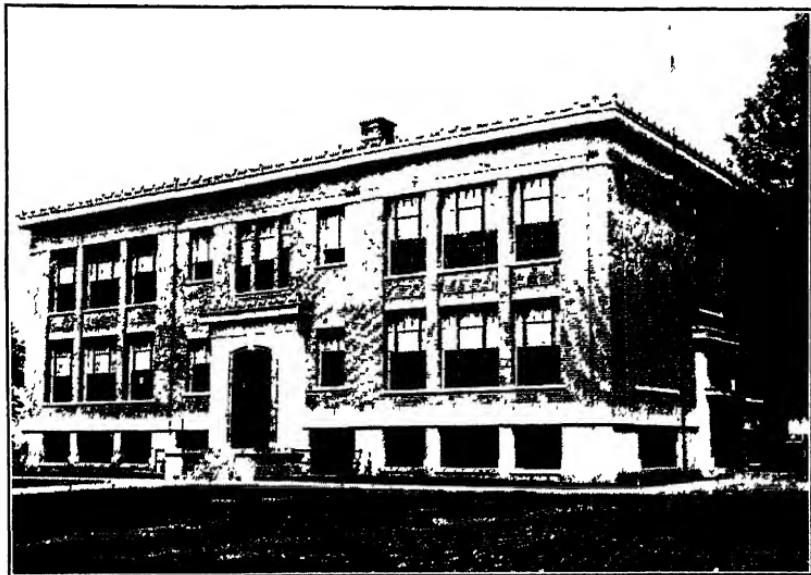
two or three classrooms may be thrown together by movable partitions into one assembly-room. In some cases movable school desks are used, and in others, where schools are still using the old variety, the desks are screwed to strips of wood which rest on the floor. Thus three or four or more desks can be pushed out of the way to give room for chairs for adults. In some cases a space under a permanent stage is arranged for storing temporarily small desks and chairs. The assembly-room feature deserves a special bulletin of the government. We cannot take the space here to do more than mention and recommend some of the features which help to make the consolidated school building a productive rural educational plant.

III. GOOD BUILDINGS FOR DIFFERENT CONDITIONS

Types of Buildings.—Remembering that a consolidated-school building in its infancy may be but a four-room building and that it may be a long time in growing up, we realize that the types of buildings will range from the small three-teacher graded school with few rural-education conveniences up to those complete plants that vie in cost and scope with the best city schools. In standardizing consolidated schools these types must be arranged for. Standards for the building alone, for the building and entire site, and for the building, site, teachers, and instruction may be set up and promulgated and enforced. Plans for several different sizes of buildings must be prepared. All must be devised with reference to future extensions, both of classrooms and of the other features suggested above, such as assembly-room, gymnasium, high-school department, with laboratories and library, agriculture and home-economics rooms, indoor toilets, etc. Plans now on foot would place the post-office in many schools of the country and make the postmaster not only a community secretary, helping the school principal, but a community middleman for marketing and



An attractive building and site. Room at ends for extensions to the rear



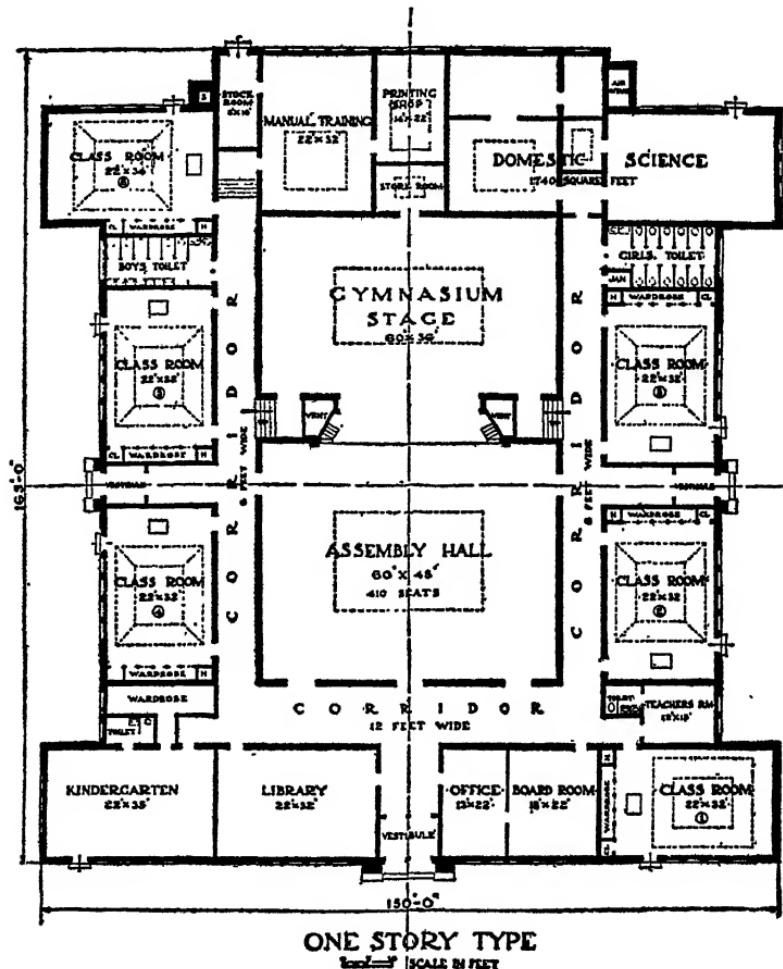
A neat example of the two-story type with basement. Poor provision for extensions

purchasing commodities. Public libraries and voting-rooms are being provided in many city schools.

We offer herewith some plans for schools of different sizes and educational scope. It is recommended that wherever possible the taxing and transportation area be made large enough at first to make possible the erection of not less than a four-room graded school with auditorium, hot-water or other central heat, indoor toilets of the water-flush type, a library, home-economics and agriculture rooms, and a teacher's room. To insure proper care of the building and the full utilization and care of the plant, not less than fifteen acres of land should be purchased and a home for the principal teacher, preferably a man with a family, provided. Products of the farm should be at the principal's disposal to add to his income. Transportation should be provided in school-owned automobiles. A good barn should be provided for housing vehicles and animals. This should stand as the minimum consolidated-school plant.

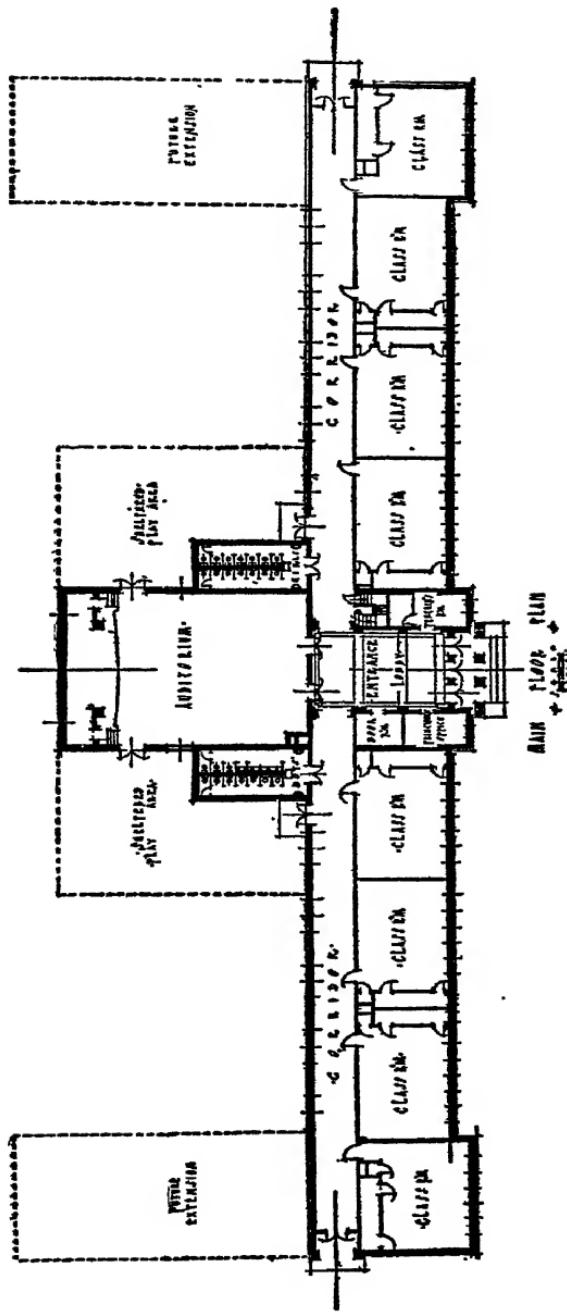
Where the district at first brings in only pupils for two rooms, the other two classrooms suggested may be used in place of the agriculture and home-economics rooms, but there are serious disadvantages here. The equipment may require moving later, and if pupils are put into the rooms as regular classes, as the district grows in size and perhaps in population there may be no extensions provided for these most necessary features of rural education until a high school is needed. There will also be other types of buildings of three kinds, namely, as to size, climatic variation, and inventive variation. New types will long continue to be invented. North Dakota and Louisiana will have considerable climatic differences. There will be almost as many types as to size as there are rooms and special features. There may also be one-story, one-story and basement, two-story, and two-story and basement types, but the one-story type should be kept if at all possible. There will also be types as to materials of construction and cost. These

cannot be discussed. A further statement of the advantages of the one-story building will be found in the last



This is an elementary school devised by Perkins for a town. The auditorium-gymnasium seems to be too closely surrounded for good natural ventilation.

chapter. Help in school planning can usually be had from the U. S. Bureau of Education and from the State departments of public education in the capital cities. No consoli-



Edison Grammar School, Centralia, Wash. Mr. Watson Vernon, Architect, Aberdeen, Wash.

This elementary school is an example of the single-row-of-classrooms type with auditorium well separated from the proposed extensions. The editor has tried to combine the advantages of this, the plans of Perkins and others in a new type of building as shown in the last chapter. The front is very long as shown in the photograph and plan. If the front is to the east, then the rooms on the extension will get largely north or south light, neither of which is best. See *American School Board Journal* for April, 1919.

dated school should be erected without the full approval of the State department mentioned, and this should have in its employ a school hygienist who is conversant with the details of consolidated-school architecture and practical building problems in the State.

Teachers should use every effort to secure truly educational school plants and rigid supervision and inspection from the educational point of view. Most so-called consolidated rural schools to-day are doomed to disappoint the community and teachers from the first by the lack of plant and equipment suited to the needs of the problem. Something may be reasonably expected from consolidation only when we have real consolidation. We *can* thresh grain with a flail but our results cannot be compared with those of the best modern threshing-machines. Let no one say consolidation is a failure until he knows not only what kind of teachers and curricula are used but with what kind of a building plant they are either helped or hindered. The well-set-up school plant contributes to the spiritual as does the well-set-up body. In the words of Browning:

“And soul helps not body more
Than body helps soul.”

PROBLEMS IN APPLICATION

1. What phases of the consolidated rural-school building need further explanation than here given?
2. Describe in detail the method of providing a satisfactory water and toilet system (including drinking-fountains, wash-bowls, swimming pool, and sinks) for an eight-room consolidated school-building provided with a good well.
3. Describe in detail a good artificial lighting system, preferably electric, for such a school.
4. What advantages and disadvantages do you see in the plan of having the auditorium, with possibly the library and some other special rooms, along the front of the building, and with the elementary school extending back from one end and the high school from the other **U** shape? See final chapter.

5. Give a list of some of the best books to use in studying consolidated rural-school architecture.
6. What educational magazine gives most attention to such architecture?
7. What are the arguments for and against a lunch-room in such a school? Should the assembly-room be used as lunch-room or library? Why?
8. Should the gymnasium and assembly-room be combined as the same room? Can they be combined satisfactorily? May the floor be of cement or composition material in the gymnasium and halls?
9. Report on at least one of the one-story school buildings described and illustrated in the *American School Board Journal*.
10. What are its advantages and disadvantages as a rural consolidated school?

Note: The final chapter may well be read before chapter X.

BIBLIOGRAPHY

1. Dresslar—"Rural Schoolhouses and Grounds." Government Printing Office.
2. _____ "School Hygiene." Macmillan.
3. Rapeer—"Educational Hygiene." Scribner.
4. _____ "Standardizing the Rural-School Plant." *School and Society* for February 13, 1915.
5. Challman—"The Rural School Plant." Bruce Publishing Co.
6. Bulletins on school architecture and on consolidation of schools published by many State departments of education.
7. Ayres, Williams, and Wood—"Healthful Schools." Houghton Mifflin Co.
8. Sargent—"Rural School Improvement in Colorado." Bulletin of the State College of Agriculture, Fort Collins, Colorado.
9. A forthcoming bulletin on consolidation by the U. S. Bureau of Education.
10. Arp—"Rural Education and the Consolidated School." World Book Co.
11. Perkins, D. H., architect, Chicago. Pamphlets on one-story elementary and high schools.
12. Lumsden, L. L.—"Rural Sanitation." Public Health Bulletin No. 94, of the U. S. Public Health Service, and published by the Government Printing Office, Washington, D. C.

CHAPTER X

THE TEACHERAGE

PRELIMINARY PROBLEMS

1. What are the principal advantages and disadvantages of requiring teachers to board with any who will keep them?
2. What retarding influence, if any, has this plan had on rural schools?
3. What are the advantages and disadvantages of providing a teacherage for the principal of the consolidated school?
4. Why should the principal usually be a married man who is employed for twelve months in the year?
5. What is the argument for providing school homes on school property for the other teachers?
6. Do you know of any instance where such homes have been provided for the man-of-all-work and caretaker of the school also?

I. WHAT COUNTRY TEACHERS NEED

The Present Status of Rural Teachers.—The annual wage of teachers is so far below a professional and necessary salary, not only in war-times and periods of rapidly advancing prices, but at all times, that everything must be done to make the conditions of work and living as attractive as possible. The community must get together and obtain superior teachers at whatever cost and then must use every device possible to make them happy in their work. Good teachers must be treated as honored guests in the neighborhood. All gossip and petty, injurious talk and tattle about them must be rigidly stamped out. Never should the children be allowed to hear adverse criticism of teachers by parents and others. *Loyalty* to those who are trying to do a noble work, easily ruined, should be the watchword. The building and grounds should be made as inviting and attractive as possible not only for the children but for the

teachers. There should be in each building teachers' rest-rooms for both sexes, furnished in a homelike way with easy-chairs and other comforts.

Why does the country lose its best teachers to the city so rapidly, usually after they have served their apprenticeship by practising on country children? Simply because the country has been so blind and stingy that it has saved pennies to lose dollars, stinted the children and teachers by a parsimony that stopped or reversed the wheels of progress, employed poor, unprepared teachers, given them meagre and unsatisfactory accommodations, and then wondered why "city folks" always get ahead of "country folks." The city that understands the problem attracts teachers and the country must do the same; for our democracy will not be "safe" with poor country teachers and superior city teachers.

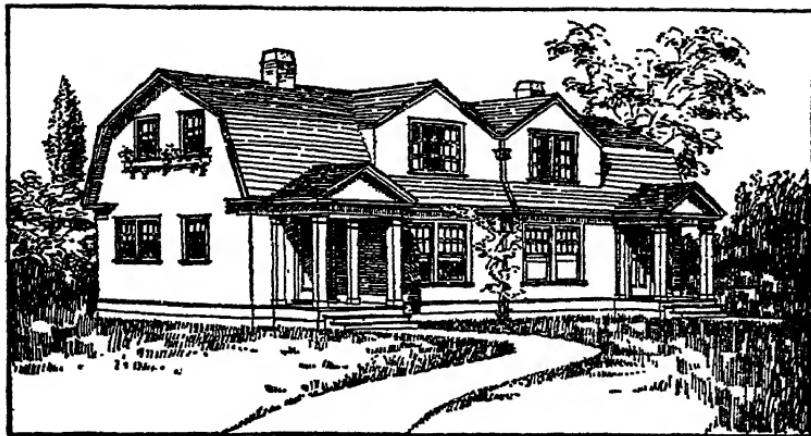
The Opportunity.—The consolidated school furnishes a rare opportunity to provide suitable working conditions. It also offers more promise than any other plan for the provision of satisfactory living conditions. The consolidated school can provide a good building with all modern conveniences for pupils and teachers, can give teachers good salaries and all the encouragement, hospitality, and loyalty desirable, and still fail to keep good teachers year after year in its service. In European countries this problem has been met by providing homes for teachers, or at least a home for the principal and his family, frequently as part of the school building. Many of the early schools grew out of the church and nearly all the schools for the upper classes were, until recent times, boarding-schools, institutions to which people came from a distance and remained day and night for weeks or months at a time. Frequently, too, the only church of the community abroad is provided for under the same roof as the school and teacher's home.

It is customary in France, Germany, and elsewhere to find both the head teacher and his wife employed by the

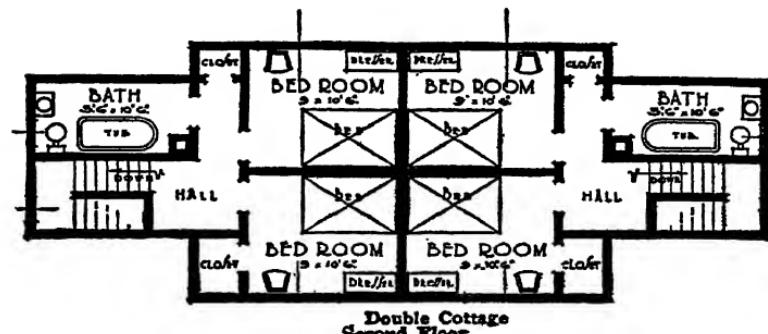
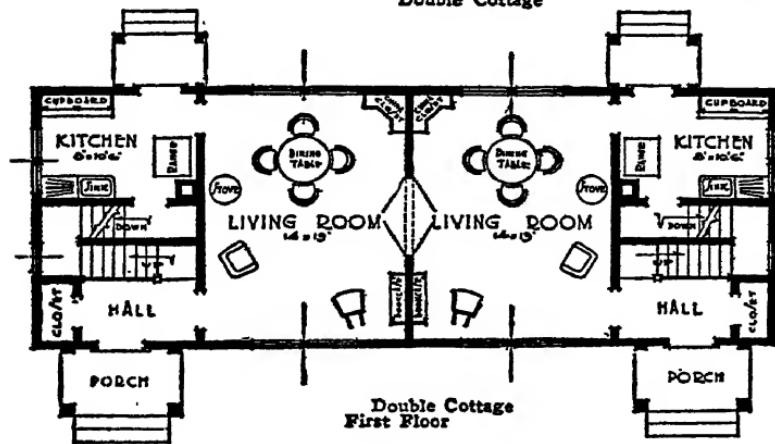
government to manage such a rural social centre even where the pupils come daily from their homes to the school. Where the church is a part of the general educational institution the district is usually all Catholic or all Protestant, and the Protestants are of but one sect, say Lutherans. The combined building is often a beautiful rural structure with a red-tiled roof showing from afar, and the principal is usually almost, if not quite, as important a man in the church, where he is frequently chorister, violin-player, or organist, and teacher of ethics and religion to the children. Where communities can abolish their sectarian differences, usually petty, if not actually based on superstitions long since disproved by science, why would it not be a good thing in this country to connect the general religious work of a community with the consolidated-school centre as at the Sargent school?

Photographs and floor plans of buildings for teachers' homes, entirely separate from the schoolhouses, in the British Isles show an attractive architecture characteristic of modern England, and a consideration for teachers as highly important government officials that compels admiration. It seems strange that in this country we should have to invent the idea of the publicly provided teacher's home and have it grow from such primitive experiments as were carried on near Walla Walla in the State of Washington in the year 1905. Many schools connected with churches as private ventures in our own country were long before this provided with a parsonage or teacherage for the teacher.

In the experiment at Walla Walla, which seems to be a typical, if not the first, instance of the kind, the teacher for whom a home was provided was a public-school teacher. Unable to obtain board and room at the home of the only family that had been prepared and willing in the past to give teachers lodging, because the people had "moved to town to educate their children," this teacher made the association between an old cook-wagon she had noticed on a visit to the school community and a place in which to live.



Double Cottage



A good type of teacherage

She secured the wagon and in company with a small brother lived all year in this makeshift "kitchenette apartment." Rain and cold assailed it and conditions were far from pleasant much of the time; but this hypothesis led the next summer to the construction of a neat two-room cottage in which this teacher lived two more years, when she went away to complete her schooling at college. Since then the teacherage movement has grown in Washington, and other States have provided "teachers' cottages," until, at this writing, there are several thousand, both in connection with small one to three-room schools and with consolidated ones. The teacherage is highly desirable in many communities, but with the consolidated schools, especially those situated in the open country, it is indispensable to real consolidation.

II. THE REASONS WHY

The arguments for the provision of one or more teacherages at the consolidated school may be abbreviated as follows:

1. *Dignity and Independence.*—Persons who must depend upon the hospitality of others in limited circumstances cannot obtain the freedom and dignity necessary to a great profession. The teacher must have the home of a teacher, which must contain among other things a room for quiet study, with books, magazines, possibly a typewriter and duplicating machine of some kind (if only a hectograph); and further than this the teacher himself must be able to secure there certain periods of freedom from interruption, such as the life of scholarship and professional service necessitates. The teachers who are compelled to live as boarders in the homes of the people sometimes have very desirable surroundings and study conditions convenient to the school, and frequently they learn much of the intimate life of their people that it is well that they should know. Yet this is not a stable, independent existence, such as could be obtained when the principal and faculty live in suitable homes provided by the school. Frequently the

differences in standards of living of the farmer's family and the teacher lead to friction and misunderstanding. In order to do really professional work and hold up high standards the teacher should be enabled to develop well his own powers, support himself in dignity, and lead a self-respecting, superior life. The school home as a regular part of the educational plant helps to give the respectability of a definite social status in the community. The physician, the lawyer, the pastor, all have their homes. In the federal government service, wherever it is, and especially in foreign countries, where it is hard to get satisfactory living conditions such homes are furnished to many officials. England and the United States have entered into a great development not only of single dwellings for government workers, but even of entire cities, well laid out and attractively constructed, and these are for both clerical workers and other employees in munition factories. Wholesale strikes occurred or threatened at first at many great government plants because of impossible housing conditions. Since the erection of such cities the workers have been enabled to live peacefully, happily, and decently in their homes, as they should. No silly cries of paternalism, socialism, or other arguments have retarded these democratic governments in such developments. The other government workers of the country must have standard living conditions also, and everything in and about their homes must likewise contribute to happiness, dignity, self-respect, and independence. The several admirable homes at the consolidated school at Franklin, New Jersey, are as much or more needed in our public consolidated rural schools managed by the government as in other important public work. They lift the profession to a higher standard.

2. *It Makes Possible a Fair Salary.*—The first essential in improved rural education as clearly demonstrated in former chapters is a salary commensurate with both the cost of living and high types of principal and teachers.

Many factors contribute to make the annual salary of country teachers far below what is necessary to procure professional educators. A small money salary in the country seems larger by far than it actually is, since farmers get their annual salaries in other forms than money, such as house rent, fuel, food, transportation, and other factors of living. They handle less money by far than that which represents their entire living and income. Thus they come to regard a small salary as a big outlay. The homes for principals and teachers can be built at the consolidated school as part of the initial outlay for the school plant, and the difference in the total outlay, in bonds or otherwise, is not large. A thirty to sixty thousand dollar outlay is little increased by three to ten thousand dollars for teachers' dwellings. When erected, however, they, like the school-farm, provide a definite part of the annual income for the schoolmaster that lays little burden on the community and dispenses with much of the psychological agony which would annually attend the problem of paying a fair and sufficient salary, including house and farm rent. Just as the church with a parsonage is relieved of much struggle in money-getting and can procure better pastors, so the school will find itself at an advantage in obtaining good teachers if house and farm rent can be included with a fair salary. The city will then lose some of its advantage as it does now in those counties where country teachers get from five to ten dollars more a month than town teachers.

3. *Good Boarding Places Are Hard to Find in Many Rural Communities.*—The location of the new type of consolidated school must be determined scientifically in full consideration of many factors. It may be in the open country. A village may in time grow up about it; but at the time of erection no convenient boarding places are available. The large and relatively expensive building and grounds need the solicitous care of one or more schoolmen. An ordinary caretaker is insufficient. In the open country,

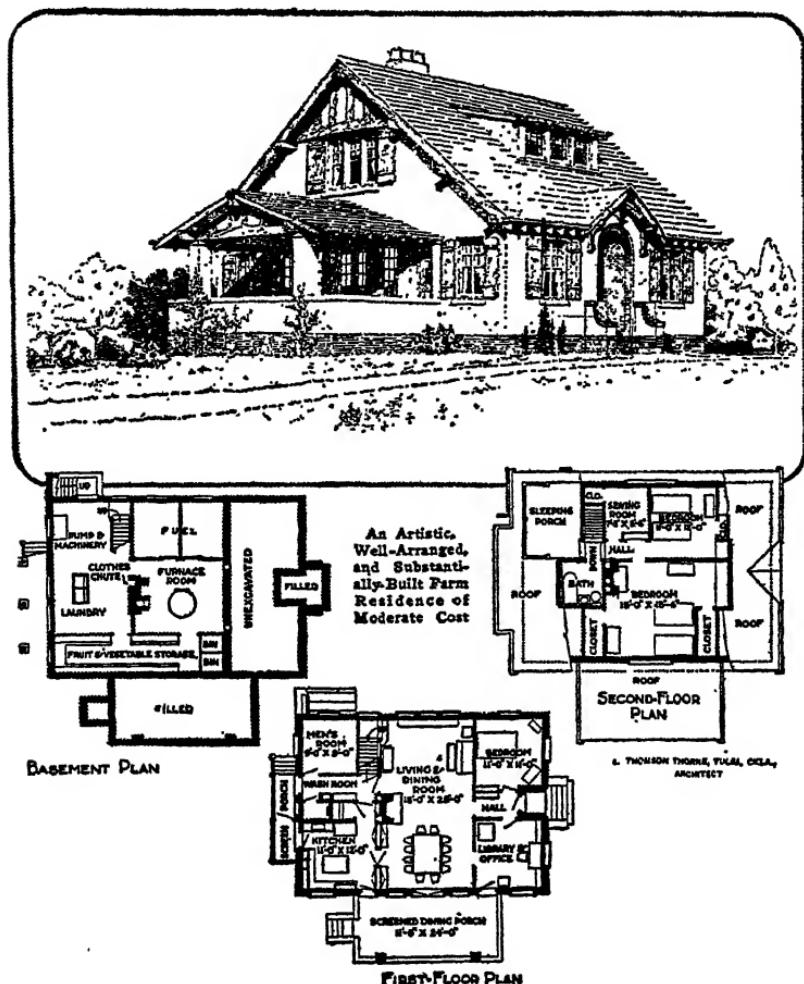
as at Franklin, New Jersey, the only thing to do is to provide homes, even if they must be erected by a private building company, receiving a long lease from the school board. At other times there may be several convenient homes but no satisfactory accommodations. In many places the landowner has moved off his farm and has "gone to town to educate his children," and the old farmhouse has either run down or a new and much smaller renter's house has been built. Tenantry management does not provide the type of household of the old days. In other cases the distances to the homes are too great, and while teachers might ride long distances each day in the school hacks or busses, this would be unsatisfactory and undignified compared with a government home on the school property.

In the reports of State superintendents of public instruction and in the several pamphlets published on the school manse, the teacher's cottage, or whatever it is called, there are many dark pictures painted of the unsatisfactory conditions of boarding out in the homes of the pupils or others of the district. Frequently teachers resign because of the impossible living conditions to which they must submit. The people of this country are to be commended for their hospitality and care of teachers in their homes. They have usually given them the best they have. In former days they even "boarded the teacher 'round," as described in "The Hoosier Schoolmaster," by Eggleston. But country life is changing; the teachers are changing in their standards and ideals and standards of living; and the demands of the times are increasing. Without painting the black picture of how much below the right living standard for the country many teachers are compelled to live, when their domiciles should instead be fine examples of what is possible, we leave this argument with only a mention of some of the sources of dissatisfaction with the boarding place: the poorly chosen food unsuited to brain-workers and perhaps to any workers, poor cooking of the food furnished,

uncultured people, no room in which to study, and no privacy, no opportunity to entertain friends, the necessity of regulating hours of eating, rising, and going to bed by those of the farm instead of by those of school life, etc. Where the consolidated school is located in a trading centre village or adjoining one the problem is not so great, but many considerations still point to the advisability of considering as a necessary part of the school plant the homes of the teachers.

4. *The Teacherage as an Example.*—The teacherage provides a possible example of a good country home. We have experimental and demonstration farms and stations in many sections of the United States and we need them in every rural community. The consolidated school and home must have a modern water-supply system from springs, wells, or cisterns and supplied by gravity, pressure-tank, engine-pump, or other method. This home should be a model in kitchen, bathroom, outdoor, and barn conveniences. The architecture of the home should set a standard for the community and should be adapted strictly to local conditions. It is hardly possible that a cottage for Arizona, Florida, California, Missouri, Maine, and Montana should be the same. A good plan for one region might be a poor one for another. Of course, the home must be for a schoolman's purpose as well as for a farm-home example. Where a farm is provided the home can be a real farmhouse. Otherwise numerous compromises must be made between adaptation to school and farm uses. The home-economics department of the school must always find the cottage a good place for demonstration of modern domestic science and art. Any one who has seen farmers' wives tramp through such a school home on opening day by the hour and any one who has seen the daily demonstrations of modern planning, decoration, and home-management devices in these schools, either established independently or partially endowed by the General Education Board, will realize the important function of the school-farm home as a demon-

stration and domestic experiment station. The home is justified on these grounds alone.



Artistic home for the progressive farmer. Teacherages lead to such homes by the force of example

5. *Full-Year Service.*—The home helps to make possible year-round service. Former chapters have emphasized the

desirability of service for twelve instead of from three to ten months a year. Home projects must be carried out largely in the summer, a costly school plant requires care in summer as in winter, the people need their meetings and recreation at the school centre as in winter. The principal should be at work on his own school-farm and should be in intimate connection with the work of the county agent, the teacher of agriculture, the experiment-station workers, and other experts on farm problems. Moreover, teachers have to eat and meet the high cost of living just as other people do in summer as well as in winter. When we get year-round workers and year-round salaries we may hope to get into rural-school work permanent, skilled workers who, as the years go by, can be of increasing service both winter and summer. The varied work that has been done in summer projects in Cook County, Illinois, and other places is suggestive of increased developments of this kind in the future. The consolidated school is a year-round institution with its work closely related to the needs of the people at all seasons of the year. The teacher's cottage makes it easy for the community to retain expert services in educational leadership twelve months in the year. Vacations can, of course, be more easily provided for teachers and principals when most convenient for the community.

6. *The Elimination of Gossip*.—The school home helps eliminate gossip and small talk about teachers that frequently arises when they are scattered about among the homes of the community. The teachers are supposed to be an educated, cultured, honorable group of people, living up to high standards and free from many of the artificial restrictions and customs inherited from previous times intended to hedge about and to guard relatively ignorant and uncultured youth and older people. The college or normal school graduate would like to live a life where he can apply himself with whole-souled devotion to his task, free from the danger of gossip which constantly threatens teachers

and other public officials. The one, two, three, or more homes on the school campus provide a place somewhat removed from this menace and irritation caused by differences in standards and occupations. The present term of service of rural teachers in one school is very short, little over one school year. Gossip on the part of patrons, teachers, and others is one of the chief reasons given for moving on. A degree of seclusion, professional association with other members of his craft, and ability to live a life according to his own standards, yet with full respect for and deference to country standards, will help save many a teacher for a number of years of service to the community. The typical rural teacher to-day is, unfortunately, a young girl, a novice in the service, with barely a high-school education, who will stay in the work but two to four years. Half of the more than two hundred thousand rural teachers have not so much as a high-school schooling, and the whole standard of what the rural educator must be is, therefore, ludicrously low. No other business in the world would succeed on such a basis. The standards for public-school service should be at least equal to those of banking, grocery, and drug-store work, and farming itself. Young girls in their teens cannot be typical of public-school workers, neither can immature young men, or older men who may know farming but not the teaching profession. Married men with families in any business make possible a solid foundation of first-class service and lasting efficiency. The conditions of living in the teaching profession must be adapted to make possible a settling down in the work on a permanent, life-work basis. The home for the principal and his family promotes this elevation of the profession, and of course other cottages can be provided, as they now are in some places, for other married teachers. Marriage here between teachers need not mean their elimination from the profession. The teachers' home or homes for unmarried teachers of each sex, with long terms of service, naturally

promote that acquaintanceship that leads to marriage, which is rather to be encouraged, as it is abroad, than condemned by the community. The teacher is to become a normal adult member of the community in which he lives, broadly socially efficient, not a transient young celibate employed at a servant's wage for a short time. The consolidated-school home is the best means yet devised for promoting this normality and efficiency of living. That such homes can be provided for other workers, such as janitors and drivers of school hacks or motor-busses, goes without saying. In some cases old school buildings can be utilized and remodelled; in others the boys in farm carpentry can build one or more cottages; in other instances building companies may be given land leases and permitted to charge rents; and in others the school board may erect the cottages, as in most cases they should.

8. *Easy to Obtain.*—The cottages are not as difficult to obtain as may be imagined. As suggested above, the needed increase in the bond issue or tax levy to secure cottages in a community possessing upward of a half million dollars in taxable wealth is not great. Outside companies, or student or adult volunteer labor may be utilized. I have seen admirable concrete, wood, and brick structures put up by students of no higher grade than those attending a consolidated school. Frequently old schools may be utilized in one way or another, and sometimes the land obtained as a site may have on it an old rural home and outbuildings. When the national and the State governments come to the rescue of public education for such features with large financial appropriations, as they must (and are now coming for vocational education), a large share of the cost of such homes may be borne by the people generally. Education to-day is a national as well as a State function.

— 9. *A Visiting and Social Centre.*—The teacher's cottage may be made a delightful visiting and social centre apart from the school itself. When the teacher is either a boarder

or comes into the district from a city each Monday and leaves promptly each Friday afternoon, there is hardly any family visiting with the teacher. Such contact is the principal bond of sociability in rural regions, and when the school teachers are cut off from it, a chasm exists between the "school people" and the "country people." We have read a number of interesting accounts of how teachers' cottages, even in connection with single-room schools, have been used to bring young and old together occasionally in small groups and thus closely bind the school to the life of the community. One principal reported that twice during the year his family had entertained the pupils of the high school and eighth grade, including some young people not members of the school. He could not have afforded to do this entertaining, he said, if he had been required to pay rent in a private dwelling. Pupils and parents drop in occasionally at such a cottage for a social visit, to play and sing the good old community songs at the piano, and to meet the teacher on the familiar footing of a man rather than a schoolman. There can be no doubt that this simple social function of the consolidated-school home is of prime importance to the success of the institution as a rural educational force.

10. *A Happy Life.*—Finally, the school home helps to make the teachers happy in their work. A group of like-minded people, highly trained, and at work in a nerve-straining profession, can become either very miserable or very happy. It is the duty of the rural-school boards to provide for the happiness of their workers, since they thereby increase greatly the efficiency of the work which they do. Social happiness is the goal of life for teachers as well as farmers. If a small addition to the general cost of the consolidated-school plant will add greatly to the happiness of the teachers and their families, giving them a settled, dignified social position in the community where they can live, teach, farm, and rear their families in ease of mind and

with reasonable comfort, farmers will not deny their most important officials the right to life, liberty, and the pursuit of happiness which they claim as their own. Those who have most to do with the very characters, lives, future happiness and ability to promote social happiness through social service, of their boys and girls, the progressive country family will support in their effort to perform this service well.

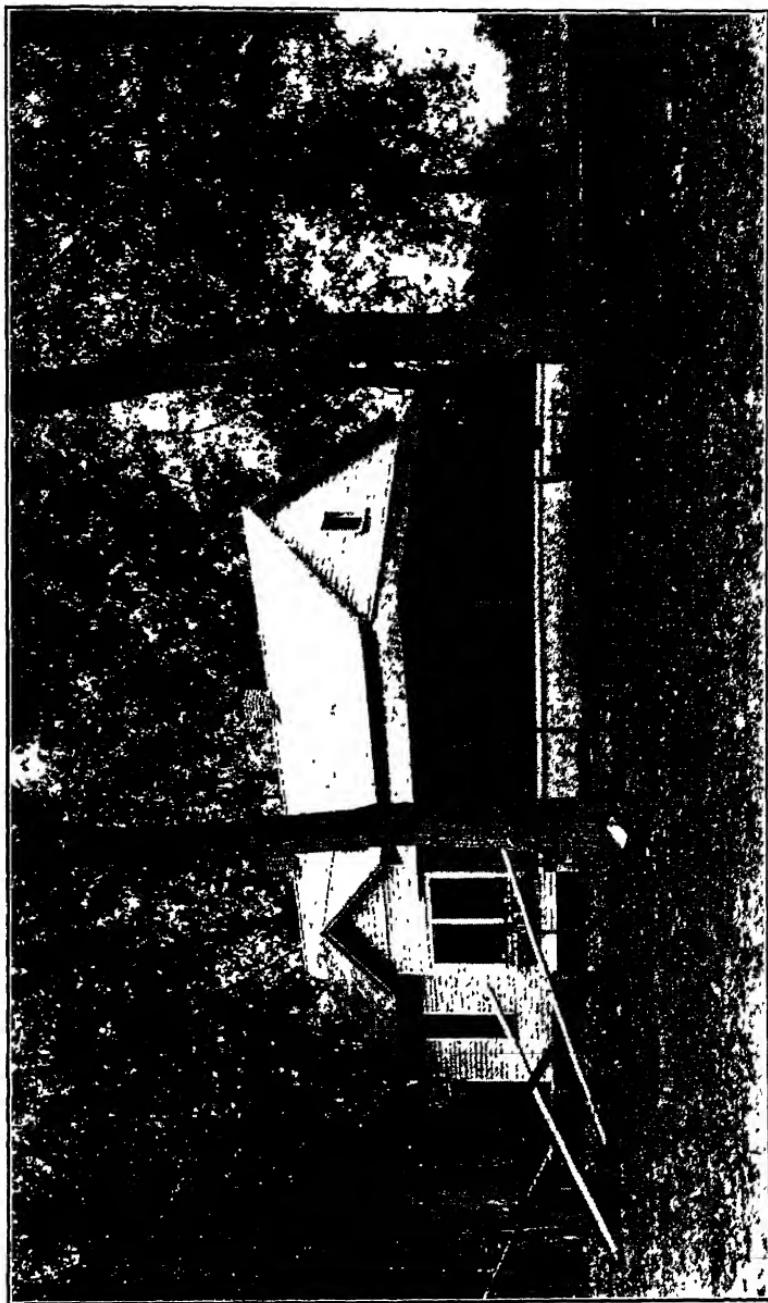
In general summary, the ten arguments settle the claims for the school home as a regular part of the consolidated rural-school plant, and meet the objections which some may bring against it.

III. THE PROSPECTS GOOD

Doctor George E. Vincent, President of the General Education Board, New York, formerly President of the University of Minnesota, reports as follows on the teacherage:

1 A teacher's house or school manse is peculiarly necessary to the success of the consolidated rural school, which, it is now agreed, is to be the typical country school of the future. There should be built, in connection with the consolidated school, on the same grounds with the school building and heated by the same plant, a permanent house for the use of the teaching staff. This building should contain a wholly separate apartment for the principal and his family, living-room and bedrooms for the women teachers, laundry, kitchen, etc. It should be equipped with a view to providing in the community a model of tasteful and economical domestic furnishing and decoration. The rentals and other charges should be so regulated as to provide for the maintenance, insurance, repairs, and renewals of equipment, but not for a sinking fund. The house should be regarded as a part of the school plant and included in the regular bond issue for construction. A privately owned manse in Illinois is netting eight per cent on an investment of \$10,000.

The manse has a bearing in several ways upon the educational work of the school. Flowers and vegetable gardens are natural features of school premises which are also residence quarters. The domestic-science work of the school can be connected in valuable



A modest teacherage in West Virginia

ways with the practical problems of manse management. The cost accounting offers a capital example of bookkeeping. The use of the school as a community centre is widened and its value enhanced. The school as an institution takes on a more vital character in the eyes of the countryside.

Most of all is the effect upon the teacher. Comfortably heated, well-lighted quarters, comradeship with colleagues—and at the same time personal privacy—a satisfying, co-operatively managed table, independence of the petty family rivalries of a small community, a recognized institutional status, combine to attract to the consolidated rural-school manse teachers of a type which will put the country school abreast of the modern educational movement. It is futile to preach the gospel of sacrifice for the cause of rural education. There is no reason why rural teachers should be called upon to sacrifice themselves. They ought not to do it, and they will not do it. The school manse is not a fad, nor a luxury; it is a fundamental necessity.

The General Plan.—The architecture and location of the home, or homes, should be pleasing and convenient. A landscape artist should plan the location and beautification of the various buildings, the farm, the playgrounds, and other features. If the principal's home alone is constructed at first, space in the ground-planning should be left for the other homes for teachers and men-of-all-work about the school plant. The school building also should be erected with the future extensions plotted so that the whole plant and site will be planned with reference to possible future developments. Many general designs for such plants have been printed in the reports of various State superintendents and students of this question. The United States Bureau of Education has a model of a complete plant which was exhibited at the Pan-American Exposition, and is published in its volume on the exhibit there. A reproduction of it will be found in the last chapter of this volume. With not less than twenty acres of land, a school building as described in Chapter IX, and modern homes for teachers and caretaker, such exhibits might well be set up in every county seat. One of these may be taken and adapted, or used

merely as a suggestion. Our plea here is for forward looking and consistent planning, which at present is an almost entirely absent quantity in the work of perhaps most school boards in the United States.

Herewith we present a few suggestive plans with photographs of exteriors of school homes that have been erected. The best is not too good for the teacherage. Less than the best is a poor investment if it is to function as an example and an inspiration or the contrary to country folk for fifty or more years. Enterprising communities will soon go far beyond what has already been done in this new and very interesting line of development in American rural education.

BIBLIOGRAPHY

1. Josephine Corliss Preston—"Teachers' Cottages in Washington." *Bulletin No. 27, 1915.* Olympia, Washington.
2. "Cottage Homes for Teachers." *Southern School Journal, 24: 11-12,* May, 1913.
3. *Southern School Journal, 24: 11-13,* July, 1913.
4. Mary B. Flemington—"The Teachers' Boarding Place." *American School Board Journal, 50: 18,* February, 1915.
5. "Homes for Rural Teachers." *North Carolina Education, 9: 18,* March, 1915.
6. Mrs. Percy V. Pennybacker—"Need of Teachers' Homes." *Ladies' Home Journal, 32: 25,* February, 1915. Illustrated.
7. "Teacherage." *Ladies' Home Journal, 31: 5,* September, 1914.
8. Mrs. Mary I. Wood—"The School Manse in Reality." *Ladies' Home Journal, 32: 25,* February, 1915.

Other publications which will be found particularly helpful in this connection are:

9. Fletcher B. Dresslar—"Rural Schoolhouses and Grounds." *Bulletin, 1914, No. 12,* U. S. Bureau of Education.
10. Wm. L. Hall—"Tree Planting on Rural School Grounds." *Farmers' Bulletin, No. 134,* U. S. Department of Agriculture.
11. A. C. Monahan and Adams Phillips—"The Farragut School." *Bulletin, 1913, No. 49,* U. S. Bureau of Education.
12. A. C. Monahan—"The Status of Rural Education in the United States." *Bulletin, 1913, No. 8,* U. S. Bureau of Education.
13. ——"County Unit Organization for the Administration of

Rural Schools." Bulletin, 1914, No. 44, U. S. Bureau of Education.

14. R. S. Kellogg—"Teachers' Cottages." The National Lumber Manufacturers' Association.
15. L. L. Lumsden, M.D.—"Rural Sanitation." U. S. Government Printing Office.

PROBLEMS IN APPLICATION

1. Look up the work and success of the General Education Board in establishing model consolidated-school plants, including teacherages, in various parts of the country, as at Alberta, Minn. Should teacherages be rented by school boards or provided free or as part of the salary?
2. In the Annals of the American Academy of Political and Social Science, September, 1917, President Vincent, as quoted above, shows what a profit a private corporation is making on a teacherage costing \$10,000. Would it be desirable to encourage building firms to put up such teacherages adjoining consolidated schools and rent them to teachers?
3. Report on the Alberta teacherage, gathering data from several sources, such as a letter to the principal, Arp's book on "Rural Education and the Consolidated School" (World Book Co.), etc.
4. Get reports on the teacherage, teacher's cottage, or school manse, from such States as Washington and Texas, each with several hundred teacherages at this time of writing. Select the best type for your part of the country and give reasons for selecting it.
5. What advantages and disadvantages would accrue from having such a teacherage as the one at Alberta in connection with a consolidated school situated, not in the open country, but in a village trading centre?
6. What help can you obtain in settling on the best type of teacherage from your State Board of Education or the U. S. Bureau of Education?

CHAPTER XI

TRANSPORTATION OF PUPILS AT PUBLIC EXPENSE

PRELIMINARY PROBLEMS

1. What are some of the chief advantages and disadvantages of pupils walking to the one-room schools?
2. What effect does it frequently have on attendance? On health? On morals? On punctuality?
3. What is the difference in these respects arising from transportation of the right kind?
4. In what ways may consolidation be a means of obtaining better roads?
5. What regular routes of wagon and automobile travel and transportation are maintained throughout the year by the government post-office and other agencies?

I. WHEN TRANSPORTATION IS NECESSARY

Public transportation of pupils is not always a necessary part of the programme of consolidation. It depends upon the size of the district to be served by the consolidated schools. If the district is not greater than 10 square miles, and nearly as wide as long, with the school located near the centre of the territory, no child under ordinary conditions would live beyond walking distance. A square 3 miles on the side would contain 9 square miles of territory, 80 per cent of which would be within 1.5 miles of the centre. No point of the square would be farther away from a school if located at the centre than 1.73 miles. Of course the distances by travelled roadways would be greater than this. If no rural school served a territory of less than 9 miles, however, there would be but approximately one-half of the present number of rural schools in the half of the United States east of a line extending north and south to our borders, through the centre of Nebraska and Kansas.

In many parts of the United States (in most of the strictly farming country) districts larger than 9 square miles will have to be taken to secure enough children to make a school large enough to require the services of three or more teachers—the minimal number of teachers if the school is to be really satisfactory. To obtain large enough taxing areas to provide not only sufficient pupils but enough money to provide a first-class school plant and upkeep, a larger area is desirable. Transportation then becomes necessary, although there are many consolidated schools in all parts of the country serving much greater or larger districts than 9 square miles that do not furnish public transportation, the parents making such arrangements as they see fit to get their children to school.

II. REQUIREMENTS

Importance of Satisfactory Transportation.—Without doubt the question of transportation is the most difficult one connected with the consolidation of schools. The transportation furnished must be absolutely satisfactory or there will be constant dissatisfaction with the school. Fifty years of experience in transporting country children to public schools in the United States has shown quite definitely the essentials that must be provided if the transportation is to be satisfactory. These essentials are:

1. A route not too long to be covered in reasonable time.
2. A definite time schedule for each wagon.
3. A comfortable and safe vehicle.
4. A satisfactory driver.

The Transportation Route.—The length of the satisfactory route cannot be stated in miles—the important consideration is the time element, and this of course depends upon many things besides the distance. No route should be longer than can be covered under average conditions in 45 minutes, or in bad conditions in about an hour. This

means usually with good roads and horse vehicles not over 6 miles. If automobiles are used, the distance may be greater.

The transportation wagon should run on a fixed schedule, leaving certain points along the route at the exact time announced. Children will then know at what time to leave their homes to meet the wagons without being required to stand and wait. Wagons should not wait for the children if they are not at the proper places on the scheduled time. The condition of the road should not be allowed to interfere with the schedule; the contract with the driver should require him to furnish the necessary "horse-power" to get through on time. Of course, two different schedules may be arranged—one for good travelling and one for the bad road season. Where children live off the road at some distance a small shelter-house may be erected. A mail and parcel-post box may be placed in the shelter.

Whether the wagons should follow the main highways or should go to the homes to pick up the children is a question which has caused considerable trouble. In the early experiments with transportation, the conveyance was from the abandoned school building to the new school, the children assembling at the old building. Later, starting-places were established at points nearer the homes of the children who lived farthest away from the school, and the other children were picked up along the route. To settle difficulties which arose over arranging the routes nearer to one home than to another, the practice began of having the school wagons leave the main road and travel in and out byways to the homes. Such practice lengthens greatly the time required to cover the route, and is never satisfactory. The most satisfactory plan is to arrange the routes in such a manner as to accommodate the majority of children, requiring all to meet the wagon at fixed places along the route. For children living more than a mile from any route special arrangements must be made. A suggestion is given

later in discussing the practice more or less common of paying the parents who provide transportation for their children.

The Wagon.—A comfortable and safe wagon is absolutely necessary. In the earlier days districts did not furnish wagons, leaving the matter to the persons awarded the contract. This necessarily limited the number who would undertake the job, as the cost of a satisfactory wagon was too great. It resulted in the employment of unsatisfactory drivers and in the use of many unsatisfactory conveyances. Now the majority of schools own the wagons, hiring the drivers, who furnish the teams. Some of the essentials of a good wagon are given below. So important is the kind of wagon that Minnesota, which gives special State aid to assist transportation, requires the use of wagons answering definite specifications as a condition upon which State aid is received.

Essentials of the Wagon.—The wagon must be well built, strong, safe, and warm. It must be covered and equipped with side-pieces to keep out wind and storm. Glass sides are much better than curtains, since the children then never sit in semi-darkness, and in addition they can see the country as they pass along. This results in better conduct. Doors should be provided at both ends, and the front wheels should "cut under," making turning easy. The best wagons are built so that the driver sits inside with the children. He is then in a position to require proper conduct and conversation on the part of the boys and girls under his charge. In cold weather the floor is covered with rugs or with straw, and lap-robés are provided. Often wagons are heated by coal or oil stoves placed sometimes inside and sometimes outside, and under the wagons. Footstones or planks of hardwood are sometimes used, being heated by parents at their homes in the morning, and again on the school stove for the return trip. In the West bags of heated wheat are sometimes used. Artificial heat, however, is unnecessary except in extreme cold, or on long routes.

The Driver.—Among those who have had experience with transportation in school wagons and in other public carriers, the sentiment seems to be much in favor of the wagon when properly managed. The trip in the steam or electric trolley car is made more quickly and in greater comfort, but the conduct of the children on public carriers is not always so satisfactory as in school wagons where competent drivers are employed. The children recognize the right of the school directors to dictate their conduct while they are riding on wagons owned or leased by the school and driven by men or women who have the same authority over them as their teachers. When riding in other public carriers, children, as a rule, feel that they are outside the authority of the school directors.

Satisfactory transportation is obtained only when competent drivers are employed. Great care must be taken to select drivers who are trustworthy, temperate, careful, and whose words will be respected and obeyed. In some instances, older schoolboys living near the end of the route drive the wagons, keeping the teams in the vicinity of the school during the day. The plan is seldom satisfactory. In many cases wagons are driven by women, particularly during the busy seasons on the farm. In bad weather their places are taken by their husbands. This arrangement is usually satisfactory. The use of a farm teamster or "hired man" is not to be recommended. Whenever a parent of one or more of the children transported is employed the service is usually satisfactory.

As evidence of the importance of proper wagons and drivers the following from the Carnegie Foundation Report on Education in Vermont is given:

In places where transportation has not been satisfactory the difficulty is often due either to the driver or to the conveyance. Parents charged that a rough boy driver had taught their boys to smoke, and tolerated and even encouraged disorder. Older drivers were sometimes intoxicated. Satisfaction almost always follows when a driver is

either a father or a mother of some of the children. A second source of difficulty is the type of wagon or sleigh used. Wagons may be so crowded that the children are uncomfortable. . . . Sometimes other loads also are carried, and the children are made to walk up hills and over bad roads. Sometimes sufficient blankets are not supplied. The greatest satisfaction has been experienced with the "school barges" purchased by some of the towns. For fall and spring these are spring wagons with top and sides curtained for protection from rain and sun. The seats extend along the sides and are cushioned. For winter use there are sleighs with closed tops. In none of those observed was there provision for heating, but the drivers had often procured soapstone or pieces of hardwood, which they heated over the school stove and placed at the feet of the pupils on their way home. These same objects were heated in the homes of the pupils in the morning and used on the way to school.

The following also in reference to Vermont, but not from the report just quoted, is further evidence:

It is gratifying to report that several towns during the past biennium have purchased barges specially constructed for the conveyance of school children. In consequence the opposition to consolidation in those towns has been greatly reduced, as parents in general are not so much exercised over the question of transportation as they are over the kind provided. The experience of those towns which have provided proper and comfortable conveyance ought to be suggestive to the towns which have not so provided.

The Automobile for Transportation.—The automobile is being used in large numbers for transportation of school children in many sections of the country, particularly in the Eastern States and in California. It is exceedingly satisfactory under proper management, and with good roads much more rapid than the horse-drawn vehicle. In many instances where "auto-busses" are used, it is found necessary to use horses and sleds during the heavy snows, and wagons for a short while during the muddy season. This plan is very feasible, since the time of the year when the automobile cannot well be used is the time when farm teams have the least work and can be obtained most easily.

In several places where automobiles are used one car

brings to the school each day two separate loads. The writer is familiar with a consolidated school located at a cross-roads. There are no children on the road to the north. Twenty-five children from the west are brought in in one wagon. There are thirty on the road to the east, the farthest living 4 miles from the school. An automobile-bus leaves the end of this route at 8 o'clock, reaching school at 8.30. It immediately departs to the south to the end of the route 3 miles away, bringing in on the return trip twenty children, who arrive at the school before 9.10. School opens at 8.45 and closes for those on the route from the east at 3.00 p. m., for the others at 3.30. The first period in the morning and the last in the afternoon are devoted to industrial work, so that the "graded" work is not in any way interfered with by the absence of part of the school these two periods. In many places, of course, automobiles are used every day in the school year, are heated by the exhaust, and are entirely satisfactory. In numerous consolidated areas the automobile is displacing the wagon.

Transportation and the Roads.—Transportation is, of course, much easier in a district with good roads than in one with bad roads, and there are many roads in the country so bad that transportation of school children is impossible over them during certain seasons of the year. However, if the roads are good enough for the children to pass over on foot they are passable for wagons, and the wagons would bring them to the school with dry feet and clothes. In muddy and wet weather many children who walk to school over bad roads are required to sit with wet feet during the day. Much ill health is undoubtedly due to this exposure.

The large number of wagons used in all parts of the country, and over all sorts of roads, is the best evidence that the consolidated school with public transportation may be established in a section with poor roads. Mr. J. B. Eggleston, formerly State superintendent of Virginia, speaking of the success of transportation in that State, says:

During the fifth year (1912) of this policy we have over 200 wagons running in all sections of the State and under almost every possible condition. We have routes as long as 8 miles and as short as $2\frac{1}{2}$ miles. We have wagons on good roads and bad roads, on level roads and mountain roads, on rocky roads and sand roads, on macadam roads and red-clay roads. We have transportation wagons of the latest and most modern type, and we have ordinary farm-wagons fitted up for the new and precious freight. We have one-horse and two-horse wagons, and in one instance we have a four-horse transportation wagon, or "kid cart," as it is called, which hauls between 45 and 50 children to school every day.

The Minnesota commissioner of rural schools says:

For a considerable period of years, too, children have been successfully transported in this State, in widely separated portions, under road and weather conditions about as favorable and about as unfavorable as the State affords. Personal investigation of the situation has shown that transportation in Minnesota is entirely practicable and generally satisfactory.

Nothing stimulates good-road building like the necessity for road travel. Consolidation has fairly intoxicated communities with a zeal for road-building. Some districts still have very poor transportation routes; but many miles of road previously impassable in wet seasons have already been put in good condition, and the good work will be taken up again with the next open season. In a word, poor roads can be made into good roads and this transformation will be made with promptitude where transportation of school children is in vogue.

Thus consolidation brings good roads, and a community need not refrain from consolidation because of poor roads. The consolidated school is the best device for promoting good roads.

Payment to Parents in Lieu of Transportation.—The plan of allowing parents or guardians a certain amount per day for providing conveyance for their own children is in operation to a certain extent in many States. It is probably the only plan feasible in sparsely settled districts, and where roads are very poor. In such cases children journey to school in buggies, on horseback, or on bicycles. Often the school furnishes a shed for the horses. The amount

allowed parents in South Dakota, Wisconsin, and a few other States varies from 10 cents per child per day to 25 cents, the amount depending upon the distance from the home to the school. Allowance is made only for the actual number of days attended.

The plan has several advantages and several disadvantages. Its principal advantage is that children ride from their own homes to the school by the most direct route and, as a rule, in less time than would be taken by a school wagon. One of the principal disadvantages is the expense. It does not require a larger expenditure of *school* funds, but the total expended by the school *patrons* is much greater. A large amount must be invested in horses and vehicles, and stabling and feed for the horses provided. If the children themselves drive, the horse is not available for other work on school-days. Another disadvantage is that it does not assure the regularity of attendance and the freedom from tardiness resulting from the use of transportation wagons, or of public electric or steam railroads.

III. GENERAL CONSIDERATIONS

The Success of Transportation.—The success of furnishing transportation seems to be universal wherever properly handled. An interesting study made in Connecticut by the secretary of the State board of education is reported in his annual report for 1913.

The expense per pupil for conveyance to elementary schools in Connecticut for 1911-12 was \$23.69 for the school year of 184 days. The total number of children conveyed was 3,481; the total expenditure, \$82,465.97. This does not include \$42,968.83 paid for the transportation of high-school pupils. The elementary children were transported by school wagons, trolley-cars, steam railroads, and by private conveyances. In many cases parents are paid a certain amount per day in lieu of transportation.

The report mentioned gives for each township in the State the number of elementary school children transported,

the cost for the year, and whether or not the transportation is, on the whole, satisfactory to the parents and beneficial to the schools. There are 120 townships in the State that reported children transported. Of these, 8 failed to report on the last item. The others reported as follows, the reports being made by the local school authorities:

Satisfactory to parents and beneficial to schools.....	95
Unsatisfactory to parents but beneficial to schools.....	9
Unsatisfactory to parents and not beneficial to schools.....	4
Unsatisfactory to parents and no report whether beneficial or not	4

Professor A. B. Graham, formerly at the head of the agricultural extension service of the Ohio State University, made a study of the satisfaction to school patrons of transportation to Ohio consolidated schools. He states that:

80 per cent of the parents report that their children attend more regularly under transportation than they did previously.

90 per cent report their children more interested in school than before.

95 per cent think their teachers show more interest in their work.

100 per cent practically agree that the social and educational interests of the township consolidated have greatly improved.

75 per cent of those who were formerly opposed to consolidation and transportation are now in favor of it.

Miss Mabel C. Williams, superintendent of Shelby County, Tenn., writes as follows:

The transportation of pupils in public-school wagons has proved to be a great success in Shelby County. The system was instituted eight years ago. We now have 15 wagons running, with petitions for many more as soon as we can build the consolidated schools. It would be impossible to persuade the pupils who ride in the wagons to leave the consolidated schools and go back to the one-teacher or two-teacher schools from whence they came. The parents and teachers appreciate the greater advantages which the large school offers. We find that the attendance is better on the wagon routes, as the children do not have to consider the weather. Only one child has ever been hurt on the wagons, and that was not serious. We have carried as many as 50 in one wagon. I do not remember that we have

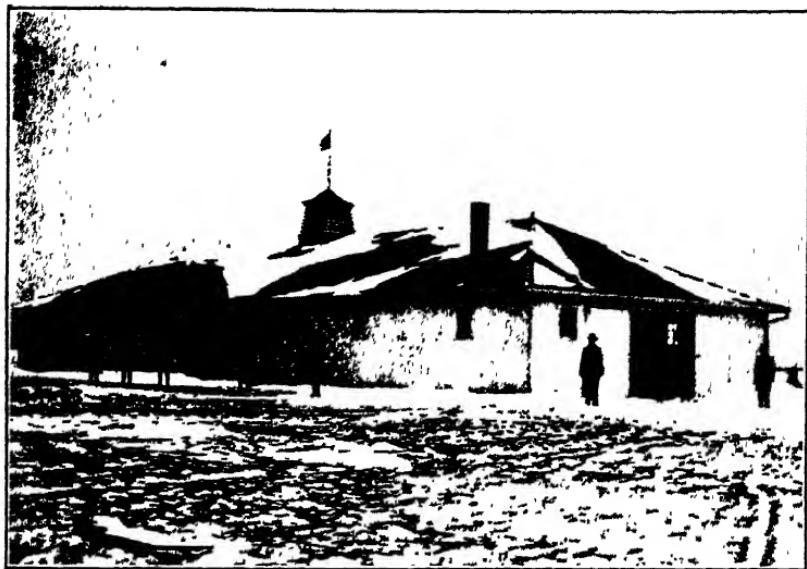
ever had a complaint of drunkenness, profanity, tardiness, or carelessness on the part of the wagon drivers. In fact, most of the trouble which is anticipated from the adoption of the public-school wagon never happens.

Seymour Rockwell, in 1893, wrote as follows regarding the Montague consolidated school in Massachusetts, mentioned in a previous chapter:

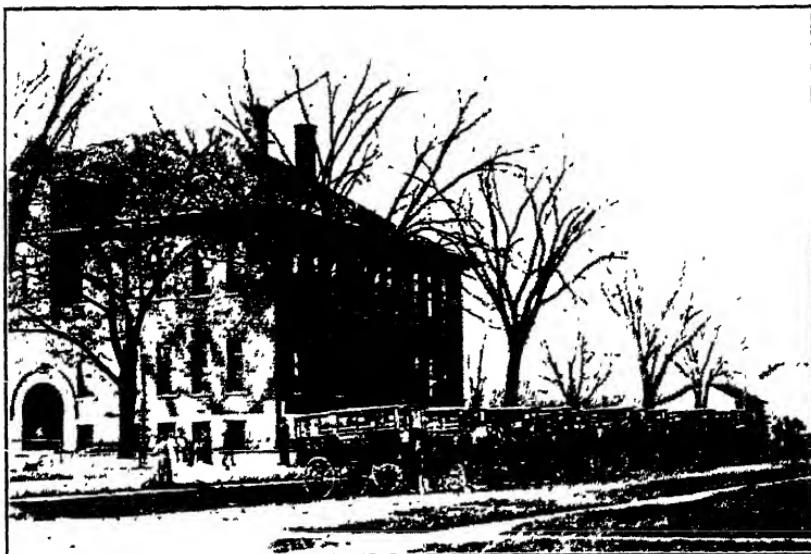
For 18 years we have had the best attendance from the transported children; no more sickness among them, and no accidents. The children like the plan exceedingly. We have saved the town at least \$600 a year. All these children now attend a well-equipped schoolhouse at the centre. The schools are graded; everybody is converted to the plan. We encountered all the opposition found anywhere, but we asserted our sensible and legal rights and accomplished the work. I see no way of bringing the country schools up but to consolidate them, making them worth seeing; then the people will be more likely to do their duty by visiting them.

With its largest attendance the school enrolled about 175 pupils, more than one-fourth of whom were in high-school grades. Pupils came to the high school from neighboring districts, which were able to take care of elementary pupils locally, but wanted the special high-school opportunities. The children were transported in six school wagons, and later in five wagons and one trolley-car.

The total number of children transported in 1912-13 was 85, at a total expenditure of \$1,550.82, or 10 cents per pupil per day. Each driver received an average of \$1.70 per day, or \$312 per year, and carried an average of 17 children. The shortest route is 2 miles, the longest 4.5 miles. The drivers furnish their own wagons and teams. The wagons must be enclosed in stormy weather, and equipped with straw or rugs under foot, and with robes. The drivers are under contract with the school authorities and must cover the routes on schedule time. They have full authority over the children while on the road, and enforce good conduct. The wagons do not stop at all the houses where pupils live, but follow routes laid out by the



A good barn for horses, vans, bicycles, auto-busses, and other vehicles,
Preble County, Ohio



Ten in a row ready for the home trip, Preble County, Ohio. Automobiles
are rapidly replacing these

school authorities, picking up the children along these routes.

The 41 years of its existence have given ample opportunity to compare the value of the consolidated school with the one-teacher school and to work out satisfactorily many of the problems in connection with public transportation. Also there has been afforded an opportunity to study the advantages and disadvantages of transportation in school wagons under school authority and in public electric cars. The experience has resulted in a sentiment in favor of the school wagons. Little disorderly conduct or improper speech ever occurred on the wagons, while both occurred more or less frequently on the cars. The wagon drivers, because they were engaged by the school board, were recognized by the children as in authority; the carmen were not so recognized.

W. L. Eaton, formerly superintendent of schools of Concord, Mass., wrote about the same year of the Emerson Consolidated School of that town, established in 1879, with transportation to the school, as follows:

The natural reluctance of parents to send their young children so far from home and for all day, to attend the centre school, has vanished. The children are conveyed in comfortable vehicles fitted up for their accommodation. They are in charge of trusty drivers en route, and at noon they are under the especial care of one of the teachers, who has an extra compensation for the service. When it is practicable, a farmer living near the extreme end of the district is employed to convey the children. Often the farmer's wife drives the conveyance—an arrangement that meets the entire approval of the school committee, and is, perhaps, the most satisfactory one possible. As a rule the committee do not approve of intrusting the duty to the hired man. Three 2-horse barges and two 1-horse wagons are in use at present. All these vehicles are fitted with seats running lengthwise and are closed or open at sides and ends as the weather requires, and in cold weather are provided with blankets and straw. The driver starts from or near the remote end of his district and drives down the principal thoroughfare, taking up the children at their own doors or at cross-street corners.

The attendance of the children conveyed is several per cent better

than that of the village children, and it is far higher than it was in the old district schools. This is not strange when one reflects that the children are taken at or near their own doors and conveyed to school without exposure in stormy weather and with entire comfort in cold or snowy weather. Discipline in the carriages is maintained readily, as the driver has authority to put out any unruly child. The children are conveyed from $1\frac{1}{2}$ to $3\frac{1}{2}$ miles.

Contract with Driver.—A definite written contract with the driver is very important. The following is in use in Randolph County, Ind.:

CONTRACT FOR HAULING SCHOOL CHILDREN

Route No. Township

Contract entered into on 19.., between,
party of the first part, and, trustee of,
school township of Randolph County, Ind., party of the second part.

The party of the first part (for the sum named below to be paid by the party of the second part) agrees to perform the following work: To drive the school wagon on route No. in school township of Randolph County, Ind., and haul all the children of school age now residing and adjacent to said route (or who may be along said route during the life of this contract) to and from the school, according to the following schedule. The said schedule to be as follows unless changed by the trustee:

Commencing at the—	Standard sun.	Returning.	Standard sun.
.....
.....
.....
.....
.....
Thence to the..... School arriving at.	Leaving.....	School at.....

Said work is to be governed by the following conditions:

1. The said school township is to furnish the wagon to be used and keep it in repair.

2. The said party of the first part is to furnish, keep, and feed all the horses, and furnish harness, necessary to haul the wagon on the said route, without any expense to the said school township, other than the pay agreed upon for the party of the first part in this contract. (Here insert conditions as to stable).....

3. The party of the first part is to have control of all the school children so hauled to and from school, to keep order and maintain discipline while in the wagon or along the route, and to treat all children in a gentlemanly and civil manner and to see that no child is imposed upon or mistreated while in his charge, and shall use every care for the safety of the children under his charge. All school hacks shall come to a full stop immediately before crossing steam or electric railways and the driver shall ascertain positively as to the approach of any danger. The party of the first part hereby agrees to prevent the use of tobacco in any form, by himself or any other person upon the school wagon while under his charge.

4. The party of the first part is to drive the wagon and take the children along the route every day that school is in session during the school year of 19... and 19...

5. The party of the first part shall inform the parents of the school children as to the time he will arrive at the place where the children are to take the school wagon each morning, so that the children can be ready to get into the wagon with the least possible delay. He shall wait a reasonable length of time for the children in case they are not ready when the wagon arrives in the morning, but he will not be required to so wait over two minutes. Said party of the first part is to use as many horses as necessary to haul the wagon on the schedule as laid down in this contract. The party of the first part is to personally perform all the said work as laid down in this agreement, unless permission for a substitute be given by the trustee, who shall designate who such substitute shall be. This contract shall not be assigned to another person to perform without the written consent of the said township trustee, as party of the second part, and to be so written upon the back of this contract. The party of the first part is to wash and clean up the wagon at end of term and place it in the school barn, or elsewhere, as directed by the trustee without extra compensation.

6. Party of the first part hereby agrees to make all reports called for by the trustee or anyone authorized by the trustee to call for them.

7. The party of the second part hereby agrees to pay the party of the first part the sum of dollars (\$.....) per day for every day such work is performed. Pay for such work can only be drawn each month during school term or at the end of the term, or on the same plan and terms as with the school-teachers if the trustee so desires.

8. The wilful violation of any of the provisions of this contract shall be cause for its forfeiture.

9. In case anything should arise not named or covered by this contract, the matter shall be adjusted by the township trustee, whose decision shall govern all parties concerned.

To all of the above we do hereby agree in every particular by signing our names on this, the day of 19...

.....,
Party of the First Part.

.....,
*Trustee of School Township, Randolph County,
Ind., and Party of the Second Part.*

Legislation Permitting Transportation at Public Expense.
—Authority is given to school officers by the State legislatures in at least 44 States to expend public school funds for the transportation of children to schools, provided the children live outside of a reasonable walking distance. Such authorization is necessary before large consolidated districts can be established. In certain States transportation at public expense is permissive only, in others obligatory. Ohio, for instance, requires free transportation to be furnished to all children living 2 miles or more from the school. Children living nearer may be conveyed free at the option of the school board. In Missouri free transportation must be provided to children living $2\frac{1}{2}$ miles or more from a school. Colorado school districts may furnish free transportation to children whose homes are $1\frac{3}{4}$ miles or more away. The consolidated district boards of Kansas must furnish transportation to children 2 miles or more from school, those of Oklahoma to children $1\frac{1}{2}$ miles or more from school. Pennsylvania provides that "no pupils of abandoned schools

shall be required to walk more than $1\frac{1}{2}$ miles to the new school building." Indiana requires all schools with fewer than 12 children to be closed and education for the children provided elsewhere. Children are transported at public expense to neighboring schools. The State has had much experience, therefore, in transportation, and realizes the seriousness of the problem. The Indiana State superintendent of public instruction, in a chapter on consolidation in his annual report for 1912, discusses it as follows:

The great objection which must be met in consolidating our rural schools is *transportation*. Many parents object, and with good cause, to the fact that their children are transported too great a distance and that they are compelled to leave home too early in the morning and are returned too late in the evening. This demonstrates that the unit of consolidation is too large. A readjustment of the consolidated area should be made, and the pupils affected should be transported a reasonable distance. In rural communities where good roads cannot be maintained throughout the year the people must be content with the district school. Where the unit of consolidation is not too large transportation of pupils has made attendance larger, more regular, and eliminated tardiness. Transportation has been a great aid to the health of the children. They are not compelled to walk through the rain and in the mud, wearing wet shoes all day. In the majority of places where we have consolidation the school officials have been very careful to get responsible men as drivers of the school wagons. Consequently, the pupils are under the care of some responsible person all day, and the girls are protected on the way to and from school, and the boys influenced from the temptation to quarrels and other misconduct.

The success of the consolidated school depends in very large measure upon transportation. If the transportation is safe, comfortable, rapid, and in charge of men of high character, no troubles result from it. When men of low ideals are in charge of transportation or when transportation is slow, or when the distance is too great, then certain evils are at once seen, and just complaint is made against the consolidated schools. These evils, however, are all remediable. If the people demand drivers of high character they can be secured. If the officials insist upon rapidity of transportation that too can be done. None of these evils in any way affect the real work of consolidation.

IV. TRANSPORTATION EXPERIENCE

To give further concreteness and serviceableness to our discussion of this very important phase of consolidation, we print here by permission a discussion by W. S. Fogarty, county superintendent of Preble County, Ohio, entitled: "Transportation of School Children."

The Ohio School Awakening.—In the past three years Ohio has had an educational awakening which has been unparalleled. One of the greatest opportunities of the new county system is that of awakening the rural people to a realization of the condition of their schools and the possibilities of improvement. One of the best compliments paid me was spoken by a very angry farmer because we were trying to consolidate the schools of his township, when he said: "You go around over the county stirring up things." The tragedy of the educational situation in Ohio was the country school. Three years ago as we went over Preble County and saw forlorn and dilapidated one-room school buildings, with ill-kept grounds, while just across the road could be seen beautiful homes with all modern conveniences and fine barns for the stock, we knew that the good rural people of this wealthy agricultural county *needed* to be "stirred up." The dismal one-room, box-car type of school building, with the old, unsightly stove in the centre with its whitewashed walls, cross-lights, window ventilation, with its dreary grounds and its insanitary condition in general, a disgrace to the community, soon will be only a memory in this county. Consolidation is the key-note of rural-school improvement. In the past three years 65 one-room school buildings have been abandoned in our county, and next year we expect to have only 25 one-room schools. We now have 10 consolidated schools, and next year will see another in operation. These buildings cost from \$10,000 to \$75,000 each, and are modern in every respect. Our purpose has been to consolidate in as large areas as possible, so that the best high-school advantages may be given

all the boys and girls. All of our consolidated-school districts are 18 to 36 square miles in area, and every one maintains a three-year or a four-year high-school course.

The limits of this chapter do not permit a discussion of the value of the consolidated school as to a modern building, adequate equipment, better teaching, larger socialization of the community, better facilities for play, maintenance of health, and a richer curriculum. One phase only, transportation of the children, will be treated.

The Routes.—It is no small problem to arrange the routes in a township to the best advantage. We have found that the best plan is to drive over every road and find out where each pupil lives, and the number of school children in each home. A plan of the township is then drawn showing all roads, the location of the homes, and the number of school children in each. With the plan and data before one, he can run the routes to the best advantage. This work cannot be done quickly, as many trial routes must be drawn before the best plan for all routes is found. Wagon routes should start at the edge of the consolidated area and take as direct route to the central building as possible. Very little, if any, retracing should be done.

Of course the number of routes in a school district is determined by the number of children to be carried. In our county the average number of routes in a township is twelve. A route travelled by a school-van drawn by a team should not be over six miles long from the place where the first child enters the wagon, and if possible it should be less. Auto routes are sometimes longer. We have good gravelled roads, with about 30 miles of macadamized roads. The average length of the routes in our county is 5.7 miles. The conveyances pass by nearly every home, so that there are very few children who walk any distance. Children living off the public road must meet the conveyance. With autos frequently two trips can be made both morning and evening. At some Western schools the autos are even using "trailers" to carry more pupils.

The character of the driver has much to do with the success of transportation. Only men who are reliable are employed. The profane or vulgar, the reckless and the drinker are rejected. Parents trust their children to these drivers as they do to the care of teachers. Boards of education should use great care in the selection of both. A few of our drivers are trustworthy young men attending the high school. On the whole they prove to be satisfactory; yet all in all we prefer reliable older men for this service, men who are considerate of the welfare of their children, and conscious of their great responsibility.

Before the war drivers were paid from two dollars to four dollars per day, depending on the length and character of the route. The cost for this service has increased the past year, and will be more next year, due to the rising cost of living. They are paid by the day, and in most cases are not paid for time lost when the school is closed on account of epidemics or lack of coal. Since the fuel shortage of last winter considerable disagreement has arisen over the question of paying drivers when school is closed for the above reasons. The attorney-general of Ohio has ruled that the terms of the contract determine what shall be done. We believe that drivers should be paid for the days only on which service is rendered. Probably in time they will be paid as are the teachers, by the year, and "whether school keeps or not." All of our boards require drivers to give bond for the faithful performance of the contract. The amount varies from \$100 to \$200. The contract and bond used in this county are here given:

PREBLE COUNTY PUBLIC SCHOOLS

CONTRACT

TRANSPORTATION OF PUPILS OF SCHOOLS

THIS CONTRACT made by and between the Board of Education of , Preble County, Ohio, party of the first part, and , party of the second part.

WITNESSETH, That said party of the second part agrees to transport to and from the Central School Building the pupils along the route known herein as Number for the full school year, in accordance with the specifications which form a part of this contract, for the sum of \$..... per day, payable monthly, which sum said party of the first part agrees to pay for services well and truly rendered in accordance with specifications of this contract.

SPECIFICATIONS

Said party of the second part agrees

1. To transport all pupils to and from the Central Building along Route No. which route is described as follows:

Beginning at the home of and thence to

..... and thence to the Central School Building.

2. To cause conveyance with pupils to start for the Central School Building not earlier than 7.00 A. M. Standard time, and arrive between 8.00 and 8.20 A. M.

3. To use the conveyance furnished by the Board of Education and to furnish a shelter for said conveyance and to place the same there over night, or when not in use.

4. To keep the conveyance clean and to furnish robes and blankets to keep the children comfortable, and in cold weather to keep conveyance heated.

5. To abstain absolutely from the use of profane and immoral language, and from the use of tobacco and intoxicating liquors in any form and prevent others from using them about the conveyance while the children are therein.

6. To provide a good team of horses. Said team must be gentle and not afraid of cars and automobiles, and must be acceptable to the party of the first part.

7. To perform personally all duties laid down in this contract, unless permission for a substitute be given by the party of the first part. Said substitute must be acceptable to the party of the first part.

8. To exercise full control of the children while under his charge and be responsible for their conduct.

9. To come to a full stop at each place where children are taken into the conveyance or let out.

10. To follow a regular time schedule in driving the route.
11.
.....
....., *President*
....., *Clerk*
Parties of the First Part
....., *Party of the Second Part*
....., Ohio, 191...

BOND

KNOW ALL MEN BY THESE PRESENTS, That we.....
as principal and and as
sureties are held and firmly bound unto the Board of Education of
....., Preble County, Ohio, in the penal sum
of \$..... for the payment of which we jointly and severally
bind ourselves.

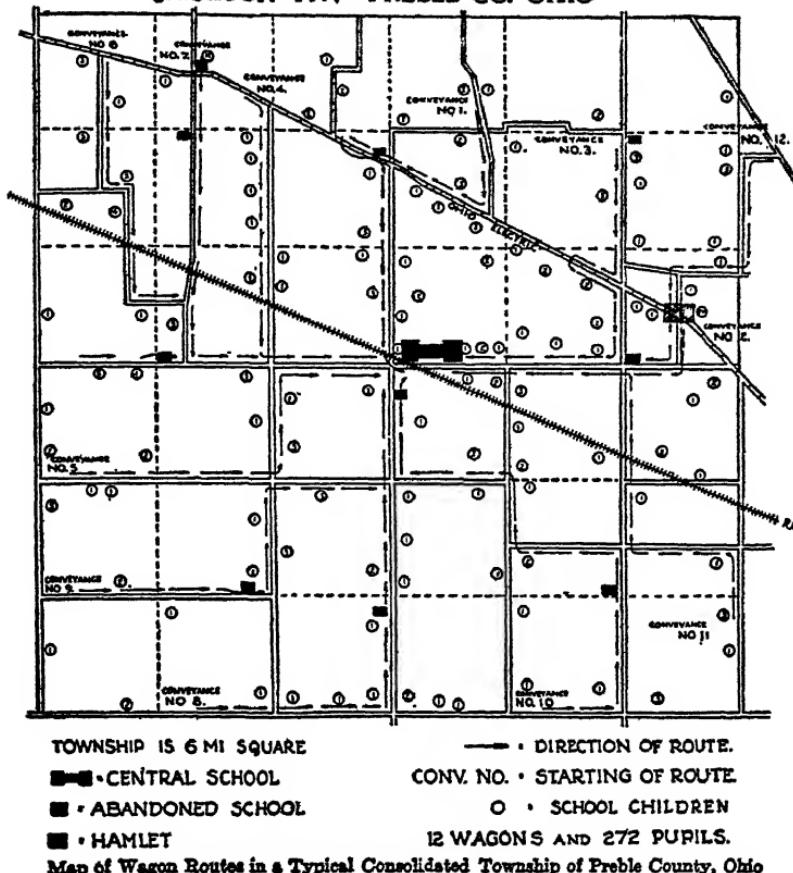
The condition of the above obligation is this: That the said
..... has this day entered into the above contract
to transport pupils along Route No. of said township to
and from the Central School Building. Now if the said.....
..... shall well and truly perform the conditions of said contract,
on his part to be performed, then this obligation shall be void. Otherwise to remain in full force and virtue in law.

Bond approved this day of,
191....

....., *Principal*
....., *President* *Surety*
....., *Clerk* *Surety*

The above rules are for drivers of teams. Auto drivers
have the same rules modified to suit their conveyance.
Transportation of children has proven entirely satisfactory,
both as to the safety of the children and as to the care exer-
cised by drivers. Seven steam and electric railroads cross
our county. We have not had an accident of any kind,
which is remarkable when we remember that nearly 1,700
children were transported to school last year.

JACKSON T.P., PREBLE CO. OHIO



The Vehicles.—Most of our 91 conveyances are horse-drawn, and are specially built for school use. These cars seem to be as perfect cars as can be constructed. It is a great mistake to buy cheap school conveyances. Good school wagons cost from \$200 to \$250. Most of our wagons are 12 feet long and carry 18 to 24 children. We demand a vehicle strong enough to support the load on any road, with close-fitting doors and windows that will keep out wind and rain, provision for heating and ventilating. In our cars ven-

tilation is assured through overhead enamelled ventilators which can be adjusted from the inside and allow protection to the children from the elements. The heating is done by heaters placed beneath the body of the wagon with a register in the floor, by foot-warmers or by coal-oil stoves. With blankets the wagons are always comfortable even in the severest weather. Seating requires deep-angled seats and backs with leather upholstery, and wide aisles between. Proper lighting is given by glass windows all around. The driver sits inside with the children, supervising their conduct. Our auto school cars are proving entirely satisfactory, and several boards expect to use this conveyance entirely in a short time. If roads permit, automobile transportation is preferable. Motor transportation is quicker, equally reliable, and usually more economical. The chief advantage of this method lies in the quickness of the service. Children are on the road about half as long as when carried in wagons. It is usual for each motor-driven car to make two trips—a long one first and then a short trip. In the evening the children living on the short route are returned home first, and those on the long route next. At the Leesport school in Pennsylvania, the wide auto has seats on each side and a double one in the middle, thus seating forty or more children. A photograph of it is shown in the editor's "Teaching Elementary-School Subjects," p. 378.

Owned by the Community.—All of our conveyances are owned and operated by the school district. Any other plan would surely invite disaster. If the driver furnished his own van, naturally it would be cheap, as he would want to make the greatest profit possible, and, moreover, he does not know how long he will hold the contract. Such a plan would call out strong protests from parents and would cause a condemnation of consolidation. For the same reason our conveyances are maintained by the district. As soon as repairs are needed they are made, and our conveyances are

kept in good condition at all times. However, it is found by experience that where breaks or injuries are due to the carelessness of drivers, the cost of these repairs should be borne by the driver. Some drivers are careless of public property and under this plan breakage is greatly reduced. The drivers must house their conveyances when not in use, and during the summer the wagons are stored in the school barn. Superintendent C. R. Coblenz of New Paris, who has been unusually successful in working out transportation of school children in Jackson township, this county, says: "With proper care these wagons will last a long time. In Jackson township, some of the wagons have been in use now for eight years. Two or three have had new sets of wheels, they have been painted twice, I think, and retired about twice. The cost of maintenance has not been as much as was at first anticipated."

All of our consolidated schools except those located in villages have a barn on the grounds to house the horses and the conveyances. These barns vary in size. A typical barn is 130 by 40 feet. Stalls for 32 horses are built on one side and the other side is left for wagons and automobiles. The barns are well lighted and arranged. The cost of a barn is about \$2,500.

Management.—The success of transportation depends very largely upon its management. This problem is largely solved when we secure a spirit of helpful co-operation among parents, teachers, drivers, and children. Definite, sensible rules must be formulated. The rules for drivers are given above in the contract. Drivers should understand that they are working under the direction of the superintendent and that all rules are subject to reasonable modification by the board of education.

Rules for children should be printed and distributed among the parents. Children while in the conveyance must be subject to a wise disciplinary power exercised by the driver. This discipline, however, must always be under the

guidance and control of the superintendent. A few necessary rules for children are: To be seated in the conveyance where placed by the driver, to refrain from all profane and indecent language or actions, to be respectful to persons whom they meet or pass on the road, to never get into or out of the conveyance while it is in motion, to neither leave nor enter the conveyance except with consent of the driver, and to know when the conveyance is due and be ready for it. Penalties for disobedience should be fixed by the superintendent. The right kind of consultation with parents nearly always secures their co-operation.

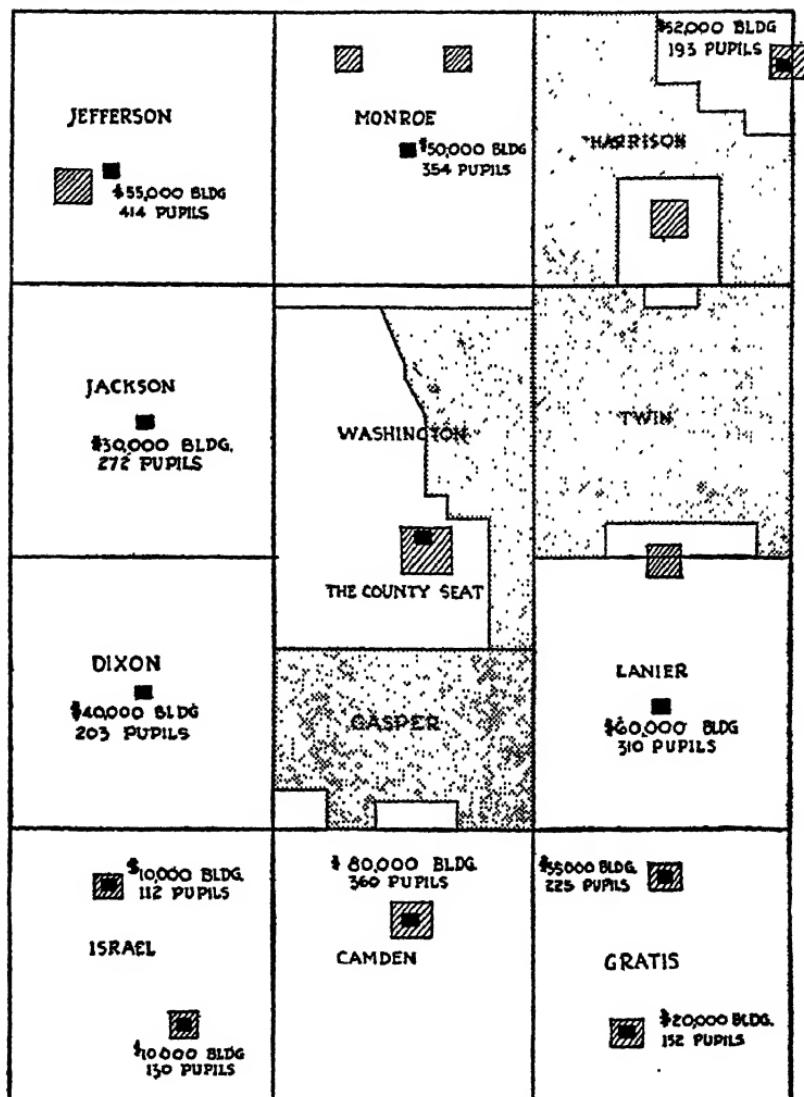
One boy in one of our townships persisted in not being ready when the wagon arrived, causing quite a little delay. The superintendent instructed the driver not to wait. The next morning the boy did some yelling when the wagon drove on and he was left for the day. He was cured.

Teachers should assist pupils in getting on their wraps and in doing whatever is necessary to be ready to leave school on time. Teachers should send pupils to the toilets before starting home, and parents should be equally thoughtful mornings. They both should talk to their children about their conduct in the conveyances.

Parents should co-operate with drivers and teachers in having their children ready on time and insist that their conduct in conveyances be proper. Parents are duty bound to have a friendly and helpful attitude toward the whole system.

Definite time schedules are arranged. Our contract with drivers of wagons requires them not to take on the first child before seven o'clock standard time, which is twenty-two minutes slower than sun time. The above time is that which we had before the government ordered the clocks moved up one hour. For shorter wagon routes and automobile routes the time of starting is later. Conveyances should not vary in time of starting regardless of roads and weather. It is better that the opening of schools

CONSOLIDATED SCHOOLS IN PREBLE COUNTY OHIO.



12 TOWNSHIPS - EACH 6 MI. SQUARE EXCEPT THE TWO IN THE CENTER
SHADED PART IS NOT CONSOLIDATED ■ - CONSOLIDATED SCHOOL ■ - VILLAGE

Map of Preble County, Ohio, showing Consolidated Schools

should be delayed a few minutes than for conveyances to be irregular in time of starting. Every parent should have a time schedule at home showing exactly when the conveyance is due to arrive at his home. Many conveyances in this county run so regularly that they are not more than two or three minutes off schedule for many weeks at a time. The average time in this county for driving a horse-drawn van a mile is thirteen minutes. When the roads are heavy it takes two to five minutes longer. With this data it is not difficult for parents to calculate closely the time of arrival of the conveyance in any kind of weather. During the short days of winter the noon recess is shortened and the children are started home at 3.15 P. M. Data that may prove suggestive are submitted herewith.

	No. of conveyances	Children carried	Av. length of routes	Av. time to drive routes	Av. cost per day per child
Camden.....	11	213	5. miles	1 hr.	\$.153
Dixon.....	11	189	6.6 miles	1 hr. 28 min.	.177
Gratis	6	107	4.6 miles	1 hr.	.132
Israel.....	8	120	6. miles	1 hr. 17 min.	.185
Jackson.....	12	215	5.4 miles	1 hr. 12 min.	.139
Jefferson	12	239	6.2 miles	1 hr. 12 min.	.15
Lanier.....	13	242	5.4 miles	1 hr. 17 min.	.156
Monroe.....	15	323	6.8 miles	1 hr. 28 min.	.156
West Elkton...	3	41	5.6 miles	1 hr. 3 min.	.25
Total.....	91	1,689	5.7 miles	1 hr. 13 min. Average for the County	\$.166

V. CONCLUSIONS

Advantages.—When consolidation is first broached in a community, it is found that conveyance of the children is responsible for much of the opposition. Many will not investigate communities where the system has proved a

success, others fail to see the numerous advantages of the larger rural school which can be secured only by conveying the children. Where consolidation has been tried a few years 90 to 95 per cent of the patrons give it their hearty support. Before the system is tried there are many wild statements about never seeing your children in daylight, teams running away, and trains crashing into vans, etc. Our answer is that these disasters don't happen. Of course no sensible person expects perfection in a system that involves so many persons and conditions. A careful superintendent in possession of the facts should have little trouble in starting a consolidated school.

The health of children is provided for better when they are carried to school. The children come to school in conveyances which are well ventilated, heated, and lighted. Their clothing and feet are dry. They are not exposed to wind, snow, and rain. The larger school building is properly heated, ventilated, and lighted. Those of us who attended the one-room country school remember how we trudged through snow, mud, and rain, and sat in a poorly heated room until feet and clothing were dry. Our experience is that there is less sickness in the consolidated school than there is in the one-room school.

Transportation is an advantage in taking care of morals. Children carried in wagons have no opportunity of fighting or hearing bad language on the way to and from school. One of the greatest difficulties of teachers of one-room schools is the behavior of children on the way to school and home. While under the care of the driver there is no misbehavior. In the consolidated-school building the toilet-rooms are kept in the best condition. Every parent knows that satisfactory conditions in such matters is of vital importance.

To convey children to school makes the attendance far better. Hear what one farmer says: "Think of the little children plodding schoolward in cold and wet and mire—when they go at all! Then count up the number of days

they are kept home altogether because of bad roads and severe weather!" Read what the records show in one township of this county the next year after the schools were consolidated. "The consolidated system of managing the schools showed many improvements over the old way. One of these was in attendance. The attendance the last year of the rural schools was 81 per cent, while this year it was 92 per cent—an increase of 11 per cent. Another was in regard to tardiness. During the last year of the rural schools in one month in one of the schools there were 33 cases of tardiness. This year, under the consolidated system, we had scarcely that number for the entire year." Who can figure the value of such an increase in attendance and punctuality?

Those who are sceptical should visit a consolidated school and see the interest on the part of the children. Why do so many boys and girls drop out of the one-room school before completing the work? The answer is: Few or no playmates of the same age and sex, school work mostly memory work and from the book, not enough attention from the overworked teacher—witness the carved desks in the country schools—unattractive building and grounds, and no high-school provision. The school should be a pleasant place. The attractive building, good equipment, pupils of the same age for games, and time for study of things as well as books make the consolidated school a place of interest to boys and girls. The organized athletics, literary and music work, and social life of such a school have a large influence in creating interest and securing the best educational results.

These suggestions from Ohio experience should make plain the details to take into consideration in providing transportation in any State. A point to remember is that transportation not only requires good roads but that it brings them. The community meetings and larger view will soon secure good roads. We may collect some of the main principles in the following:

SUMMARY

1. Many consolidated schools with from 3 to 6 or more teachers could be established in the eastern half of the United States in districts of approximately nine square miles, for which public transportation would not be necessary.
2. In districts large enough so that transportation must be furnished, too great care in its arrangement cannot be exercised. Unsatisfactory transportation will cause constant dissatisfaction with the school.
3. Dissatisfaction always results if routes are too long. No route should be longer than can be covered under average conditions in an hour, or better, 45 minutes, the transportation wagon or automobile travelling on a fixed schedule.
4. In order that safe, comfortable, suitable wagons and automobiles shall be used, they should be purchased by and remain the property of the school district.
5. The driver must be a reliable person, able and willing to keep discipline in his wagon, and have the same power to do so as is given to teachers in the school building.
6. Transportation cannot wait for good roads; the two come together. Wherever the roads are so bad that it is not possible to furnish transportation, they are certainly too bad to ask children to walk.
7. Transportation to public schools has been furnished in the United States for over 40 years. It can be made entirely satisfactory from every standpoint. Wherever it has not been satisfactory, the fault has been the school directors who failed to make proper arrangement for it. It causes better attendance, it keeps children out of mischief on the way to and from school, and it is safe. Very few accidents have ever happened to children in school wagons.

PROBLEMS IN APPLICATION

1. Secure or make a good map of your county, or a part of it, and locate the best sites for consolidated schools.
2. Trace the transportation routes of each vehicle. Plan for automobiles if they are feasible.
3. What are the best types of modern roads for your county, and by what procedure are they obtained?
4. Is the supervision of pupils in the transportation van less important than on the playground, in the classroom, or at home? What virtues may be cultivated in pupils by efficient drivers?

5. Should pupils with homes far from the routes be encouraged to build waiting shelter-houses at the roadside, or are these unnecessary?
6. How should a school be built to provide for loading and unloading pupils without exposure?
7. Are parents ever paid for the transportation of their own children? Is this desirable?
8. Could the repair of the transportation automobiles be profitably undertaken by high-school pupils as a phase of science or vocational work?
9. Cite any instances of the use of transportation hacks being used for the carrying of patrons to social-centre events in the evenings. Is this feasible?
10. What types of school transportation have failed to give success?

BIBLIOGRAPHY

1. Monahan—"Consolidation of Schools and Transportation of Pupils at Public Expense." Government Printing Office.
2. Betts and Hall—"Better Rural Schools." Bobbs-Merrill Co.
3. Arp—"Rural Education and the Consolidated School." World Book Co.
4. Monroe—"Cyclopedia of Education." Macmillan.
5. Cubberley—"Rural Life and Education." Houghton Mifflin Co.
6. Bulletins on transportation and consolidation published by various State departments of education.

CHAPTER XII

METHODS AND FACTS OF CONSOLIDATION

PRELIMINARY PROBLEMS

1. What is a satisfactory cost for a first-class consolidated school, with auditorium, gymnasium, laboratories, and necessary workrooms for about three hundred elementary and high-school pupils?
2. How can the community be brought to wish and to will the consolidated-school plan into existence?
3. What is the cost of transportation of pupils per day and per pupil?
4. How does this cost compare with the cost of running a one-room school?
5. What would it cost in a consolidation area to provide *first-class* one-room schools, and how does this combined cost compare with that of a first-class consolidated-school plant?
6. Relate the methods used in accomplishing consolidation in a particular instance of which you have direct or indirect knowledge.

I. IN PREBLE COUNTY, OHIO

A Campaign for Consolidation.—The great school code of Ohio became a law in 1914. The corner-stone of this excellent new school code is compulsory county and district supervision.

Some conditions before the consolidation movement began in Preble County were: a wealthy agricultural county with good roads, seven villages with modern schools, many poor "box-car," one-room buildings in rural districts, and only one of the townships with full-time supervision.

Six district superintendents giving full time to supervision, and all in favor of consolidation, assisted me. Our aim was to improve the rural schools of the county. Believing that the strategic point in this movement is consolidation, we began our campaign. We planned to consolidate as

large areas as possible, and in no case has the territory consolidated been less than one-half of a congressional township. If a village was located right, the rural district about and the village were consolidated.

In conducting our campaign we had a general plan, but it varied to suit the local conditions. First we sought the help of the school officials, the teachers, and some influential patrons. Elections were called upon petition of the people, and not by the county board of education, nor the local board of education. This method has two advantages: first, the movement apparently comes from the people, and second, those who carry the petition become active supporters, and also learn who favor and who oppose. Both consolidation and issuance of bonds were submitted at the same election. This method saves the expense of two elections.

Our policy was to conduct an educational campaign for about ten days immediately preceding the election. The people must be shown the advantages. Of course, we have those who will not be shown; some who wish to keep taxes to the lowest limit, who believe that the cheap school is the best; and some who have so much sentiment for the "little red schoolhouse" that they can endure no change. Both superintendents and interested patrons got out and did personal work from house to house. Some of the campaigns were so organized that no voter was missed. A card index was made, and every voter's name was listed upon a card. If he was doubtful, he received several different calls. We converted some farmers in the corn-field.

Public meetings were held in the schoolhouses. These meetings were advertised, and in almost every instance drew a good crowd of interested men and women. Two speakers were assigned to each meeting. We used superintendents, available men from the State Department, and patrons. The people were invited to ask questions and to take part in the discussions. Some lively meetings were held.

About two days before election we mailed every voter a bulletin which contained a cut and description of the proposed building, gave some of the advantages of consolidation, and furnished financial data to show that they could build and consolidate their schools. Sometimes we sent a personal letter to each voter. We believe these circulars had great influence.

Jackson township, shown on page 229, had been centralized with great success for four years. The transportation problem there had been worked out to entire satisfaction. We made good use of this example in our propaganda.

To secure consolidation we stressed these advantages: A modern building, adequate equipment, better teaching, larger socialization of the community, better facilities for play, and a good high school for all.

Good Results.—Consolidation became the fashion in our county, and the epidemic helped us. Ten elections were held within five months. Eight new school buildings were constructed within two years; the ninth has recently been completed. These school buildings cost from \$10,000 to \$60,000 each, and their total cost is \$371,000. See page 233.

Eleven consolidated schools in this county are giving the children the best advantages of a modern education. These schools make for efficiency by division of labor, they provide for maintaining good health, they offer opportunities for good science work through their laboratories, they provide ample grounds and equipment for play, and through the auditorium they make possible good community work.

Significant Facts.—The following data are taken from this year's annual report of the schools in Preble County:

County	Before Con- solidation 1914	Since Con- solidation 1917	Increase
School property.....	\$374,925	\$601,120	60%
Volumes in school libraries.....	14,881	20,836	40%
Enumeration of school youth.....	5,135	5,076	less
Total enrolment.....	4,374	4,508	3%

THE CONSOLIDATED RURAL SCHOOL

County	Before Con- solidation 1914	Since Con- solidation 1917	Increase
Enrolment in high schools.....	523	698	33%
School buildings used.....	108	52	less
One-room schools in use.....	92	34	less
Consolidated schools with high school	1	11	1100%
Wagons carrying children.....	10	91	900%
Teachers graduates of college or nor- mal.....	16	63	400%
High-school graduates.....	112	122	9%
Eighth-grade graduates.....	168	285	70%

DOMESTIC SCIENCE AND MANUAL TRAINING

	Before Con- solidation 1914	Since Con- solidation 1917	Increase
Pupils in domestic-science work.....	121	392	224%
Manual training.....	61	155	154%

EXHIBITS AT THE COUNTY FAIR

	1914	1917
Value of exhibits.....	\$25	\$800
Educational hall provided.....	No	Yes

ANNUAL COUNTY PLAY DAY

	Before Con- solidation 1914	Since Con- solidation 1917
People present.....	None	3,000
Entries.....	None	1,494
Different pupils entered.....	None	524

TRANSFERS OF TERRITORY BY COUNTY BOARD

About 58 square miles.

DISTRICTS DISSOLVED

One village.
Two townships.

INTERSCHOOL CONTESTS

Baseball, football, basket-ball.
Literary and music, spelling.

PLAY-GROUNDS

Landscaped and part of them planted.
Play apparatus provided.

TEACHING

Consolidation of schools is giving us better-trained and more experienced teachers, with a longer tenure of position. These teachers working together have all the advantages of close association that comes from frequent teachers' meetings, and also the advantage of close supervision.

	Before Con- solidation 1914	Since Con- solidation 1917
Teachers who are college graduates...	13	28
Teachers who are normal graduates...	3	35
Graduates of first-grade high school...	98	124
One-year certificates...	89	52
Three-year certificates...	16	56

HIGH-SCHOOL EDUCATION

	Before Con- solidation 1914	Since Con- solidation 1917	Increase
High-school enrolment in county.....	523	698	33%
Lanier township.....	22	44	100%
Jackson township.....	32	65	100%
Monroe township.....	27	71	163%

STARTLING HIGH-SCHOOL FACTS

	Washington (Not Consoli- dated)	Jackson (Consolidated)
Graduates—eighth grades in last 4 years.....	80	60
Number of them in high school.....	33	55
Per cent going to high school.....	41	91

Careful investigation by many able men, as stated above, proves that every day of a boy's high-school education is worth more than \$10. Then the loss to Washington township every year is (47 pupils at \$10 per day for 160 days) \$75,200. The money loss in this township every year is astounding. The loss in happiness and success in life is a tragedy.

BOYS' AND GIRLS' CLUB WORK

14 clubs.

200 members.

3 boys and 1 girl sent to Washington, D. C.

1 boy and 2 girls sent for a week at State university.

\$68 in cash prizes distributed.

SCHOOL COMMUNITY MEETINGS

January 1, 1917-June 1, 1917

	Lanier Tp. (Consolidated)	Twin Tp. (Not Con- solidated)
Attendance.....	2,625	890
Money raised.....	\$225.90	\$3.75
	Jackson Tp. (Consolidated)	Washington Tp. (Not Consolidated)
Attendance.....	2,833	657
Money raised.....	\$183.20	\$10.30

COST

	Monroe Tp. (Consolidated)	Subdist. No. 10, Wash- ington Tp. (Not Con- solidated)
Average annual cost for tuition and trans- portation.....	\$37.62	\$50.90
	Somers Tp. (Before Con- solidation)	Somers Tp. (Since Con- solidation)
Average daily attendance.....	81%	92%

Money spent for education is an investment in boys and girls. Men are investing more in wheat-sowing that they may reap larger harvests, and they are putting more money into the housing, feeding, and breeding of stock that larger returns may be attained. Our cities and more progressive villages are making very large investments in the education of their boys and girls, believing that no money spent for the public brings such large returns as that invested in education. It is common knowledge that the farmers of Preble County are very prosperous. Is there any good cause

why they should not have the best modern school for their children?

The country can produce its share of socially efficient men and women best by providing the best kind of school. The consolidated school as it will inevitably be developed is this school. Some of the advantages as given in my recent annual report are as follows:

II. ADVANTAGES OF THE CONSOLIDATED SCHOOL

Building.—Who can measure the uplifting influence upon the child who for twelve years goes to school in one of our beautiful modern consolidated school buildings instead of going to a dreary one-room school building? The school-house should be the best building in the community and should meet the requirements of a modern school. Such a building in this twentieth century must consist of more than one room. Our cities and villages have fine buildings constructed to carry on the work in education of the age in which we live. There is something wrong with a community where you find the average barn more commodious and better fitted for the purpose for which it was built than is the schoolhouse. What is said in Chapter IX and the final chapter of the volume points the way to an ideal consolidated-school building.

Health.—Our new buildings have regard for the eyesight of pupils, providing for better lighting than in one-room schools. The consolidated school has a modern system of distributing heat evenly over the building. Even yet in this progressive county one may see in one-room schools some children roasting near the unjacketed stove and some freezing near the windows. Our new buildings have excellent systems of ventilation by which air is supplied continuously. The one-room school was constructed without any provision for ventilation. The consolidated school employs a janitor who keeps the building clean. The children come

to school in wagons that are warmed and ventilated. Their clothing and feet are dry. They are not exposed to wind, snow, and rain. The health of our children should be of prime importance and we should give large attention to their welfare in the school building.

Morals.—In the new school buildings toilet-rooms are kept in the best condition. Every thoughtful parent knows that satisfactory conditions in this matter are highly desirable. Children carried in wagons have no opportunity of fighting nor hearing bad language on the way to and from school. One of the greatest difficulties of teachers of one-room schools is the behavior of children on the way to school and home. The question of morals is of vital importance to all.

Beauty.—The beautiful has always been associated with the good, and the ugly with the bad. The question of beauty never entered into the construction of the old "box-car" one-room school building. To-day people are building more beautiful houses, barns, and school buildings. The architectural beauty of our new school buildings and their well-landscaped grounds will prove to be silent and powerful forces influencing the characters of the boys and girls.

Teachers.—While there are many good one-room schools and some capable and experienced teachers are working therein and doing their best for the children under their charge, yet the fact is that a large per cent of the teachers of this class are inexperienced and are poorly equipped. Teachers of experience and training leave the one-room school because of lack of association with other teachers, and because there are so many grades and classes. The teachers in a centralized school form a congenial, happy group. By meeting every day and through discussion of mutual problems they stimulate one another to the best efforts. Having one or two grades, they become efficient in that line of work. This is an age of specialists, and no teacher should teach more than two, or at the most three

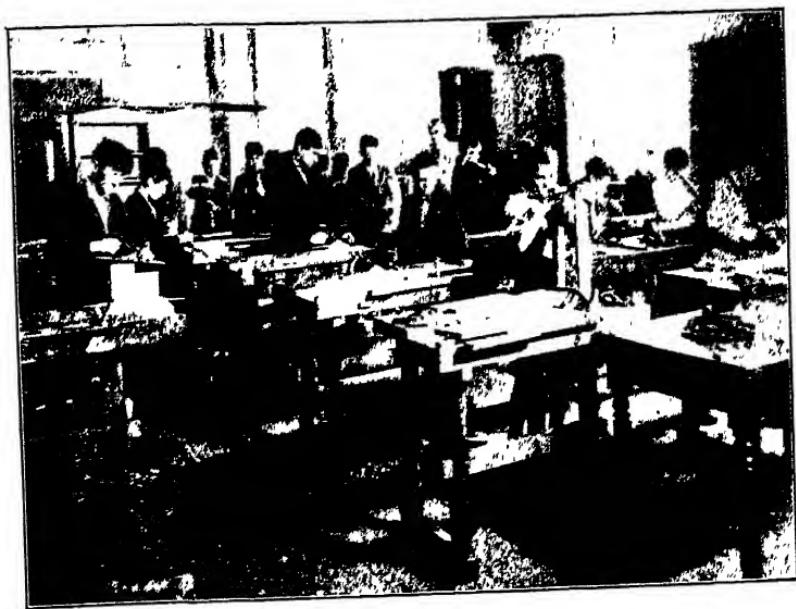
grades. Children of different ages need different methods of instruction and leadership and should have teachers specially prepared for certain grades. In the consolidated school, the teacher of the primary grades is chosen because she is naturally fitted to teach little children; the teacher of the upper grades because he is equipped as a leader of boys and girls. The increased value of the teaching is untold. No teacher with eight grades and the enlarged curriculum demanded in this age can do effective work.

Class Work.—The larger school means larger classes. One of the most important things in the education of the child is to come in contact with children of his own age. In many one-room schools this stimulating influence is entirely lost. One may see class after class called up with only one or two pupils. Such children are very unfortunate. Ten to thirty pupils in a class is far better. In the one-room school the teacher has twenty to thirty classes a day and has from five to fifteen minutes for a recitation. In our larger schools the teacher has one or two grades and the recitation will be twenty to thirty minutes in length. In the one-room school of eight grades the teacher gives one-eighth of her time to your child, while in the centralized school she gives one-half or all of her time to your child. This fact alone justifies the new plan of giving better schools to the country children.

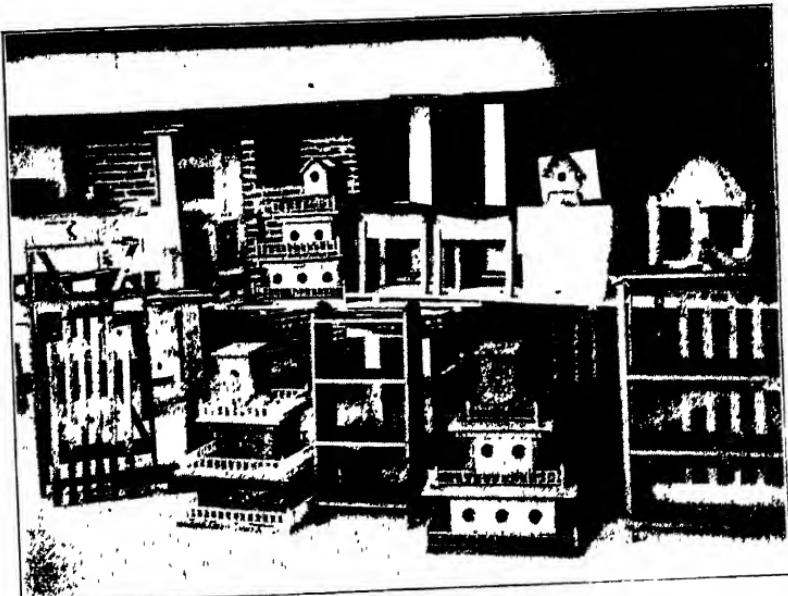
Curriculum.—The one-room school has an overworked teacher, too many classes, and no laboratory facilities. The consolidated school has teachers qualified for the special work required by a modern curriculum, has fewer classes and longer recitations, and has good laboratories. One of the great faults of the one-room school is the predominance of memory work taken from the text-book. The fault is caused by too many classes and an overworked teacher. In the consolidated school there is opportunity, not alone to teach text-book facts, but to take up such subjects as will acquaint the child with his environment. He will learn

something of the great laws of nature. The boys and girls who are to mould the rural life of the next generation are in the rural school to-day, and most of them will go directly from this school to their life's work. Agriculture, domestic science, and manual training cannot be taught successfully in a one-room school. In the new schools the old fundamentals will not be neglected, but a new emphasis will be placed upon them. Education now is not thought of as mere culture or discipline of the mind. To-day it includes these and more. It deals more with practical concrete subjects and prepares for vocational life. The centralized school teaches the "three R's" better, gives more culture and discipline, and also offers the opportunity for study of farm crops, the farm stock, and the farm home. For ages agriculture has been thought of as an art only, but it is a science and a business as well. Home-making and agriculture are the biggest vocations in our country and they involve more complicated problems than do any other two vocations. The influence of the centralized school in offering a more practical and interesting curriculum cannot be estimated.

Interest.—Those who are sceptical should visit a consolidated school and see the interest on the part of the children. Why do so many boys and girls drop out of the one-room school before completing the work? The answer is: Few or no playmates of the same age and sex, school work mostly memory work and from the book, not enough attention from the overworked teacher—witness the carved desks in the country schools—unattractive building and grounds, and no high-school provision. The school ought to be a pleasant place. The attractive building, good equipment, pupils of same age for games, and time for study of things as well as books make the consolidated school a place of interest to boys and girls. The organized athletics, literary and music work, and social life of such a school have a large influence in creating interest and securing the best educational results.



A start toward farm carpentry



Bird houses constructed in Preble County schools, Ohio

At one time it was generally thought that education was a study of books. To-day we know that the child is educated by all of his activities and his environment. So we provide for the best play and social life, we provide opportunities for such expressions as will educate, and we give the child a school life which prepares him for more complete living. The successful farmer is a man interested in his farm, the successful business man is one interested in his business. The consolidated school in every way is suited to make children interested in their school life.

Play.—Our consolidated and centralized schools are providing from six to ten acres of land for buildings, play, school gardens, and other agricultural experiment work. These schools are putting out playground equipment, such as swings, slides, seesaws, giant stride, and horizontal bars. Some of this apparatus is made by the manual-training class. In addition, we find baseball diamonds, basket-ball, lawn-tennis, and volley-ball. Teachers are more interested and learn new games to teach the children. In many of the one-room schools not enough boys are found for a good baseball game. In fact, there is little organized play, because there are not enough children of the same age to have a good game. They stand around in small groups and plan some mischief. Organized play is a great help in saving our boys and girls. On stormy days the children play in the gymnasium or in play-rooms.

High Schools Made Available.—Clearly it is our duty in this twentieth century to provide a good high school within easy reach of every boy and girl. One of the big advantages of the consolidated system is the provision for a rural high school. In 1914 the high-school enrolment in the Preble County school district was 523, and last year the enrolment was 698, an increase of 175, or 33 per cent. This increase is remarkable when it is remembered that the enumeration of school youth has decreased by 59 in that time. The great increase is due mostly to consolidation of schools. Two years ago, before Lanier township central-

ized, she was sending 22 pupils to neighboring high schools, and now her enrolment is 44, which is just double. Previous to consolidating her schools, Jackson township had 32 pupils in high school, and now under the consolidated system she has 65 pupils in high school. Two years ago the Monroe township school district had 27 pupils in high school, while now 71 of the 94 pupils enrolled in the consolidated high school come from the township district. This is an increase of 163 per cent. In the light of the times in which we live these facts are startling. Our progressive farmers are resolved that a high school shall be accessible to all.

Probably 90 per cent of the boys and girls in the country will remain on the farm, so the rural high school should emphasize the life of the farm in its curriculum and in its teaching. To a large degree the rural high school should be a vocational school, preparing for the occupation of the farm and the farm home. In our cities, schools are preparing boys and girls for the great occupations of the city. They are endeavoring to give them the education that prepares them best for the life a majority of them will lead. A very large per cent of their pupils will engage in the industries of the city. Should not the rural high school prepare for the farm life in place of preparing for college and the professional life? The emphasis of the curriculum of the rural high school should be placed on the scientific and industrial side and not on the linguistic and mathematical. One of the great advantages of the centralized township over those not centralized is the fact that it gives practically all of their boys and girls a high-school education.

Let us compare Jackson, a township centralized for four years, with Washington, a township not centralized. Jackson township maintains a first-grade high school. Washington township does not maintain a high school, but within the township district is the county seat, Eaton, which has a first-grade high school. In the past four years there have been graduated from the eighth grade of the Jackson town-

ship school 60 pupils and from the Washington township schools 80 pupils. Jackson township has 55 of the 60 eighth-grade graduates in high school, while Washington township has 33 of her 80 graduates in high school. In these four years 91 per cent of the Jackson township eighth-grade graduates have entered high school, while only 41 per cent of the Washington township pupils have gone to high school. What is the result? In the past four years in Washington township, with her one-room schools, 47 pupils were deprived of a high-school education. These boys and girls are handicapped for life. Careful investigation by many able men proves that every day of a boy's high-school education is worth more than ten dollars. The financial loss in this township every year is astounding. The loss in happiness and success in life is a tragedy. Why is there this difference? In the consolidated township the children are accustomed to going to the central school, and when they are ready for the high school they are acquainted and do not feel timid about entering. In the second place, they are carried free to the high school. In townships not consolidated they must provide their own conveyance. In some cases parents cannot afford the cost of keeping an extra horse for this purpose, and in some cases a girl cannot be trusted to drive alone five or six miles.

In the larger school there is a better organization and classification of the work which also is being modernized to meet the intellectual, industrial, and social needs of rural community life. In our consolidated schools there are courses in agriculture, manual arts, domestic science and household arts, and commercial subjects. In 1914, before consolidation, we had 121 pupils in domestic-science work and 61 in the manual-training courses. In 1917, after consolidation, there were 392 pupils taking domestic-science work and 155 taking manual training, an increase of 224 per cent in domestic science and 154 per cent in manual training.

Costs and Returns.—Good consolidated schools cost more money than one-room schools. The houses and barns being built to-day cost more than they did forty years ago. The farming implements now used cost more than they did in the days of the scythe and the cradle. We are buying expensive automobiles instead of using the cheap conveyances of many years ago. Shall we not have a modern school even though it costs somewhat more?

Money spent for education is an investment in boys and girls. Men are investing more in wheat-sowing that they may reap larger harvests, and they are putting more money into the housing, feeding, and breeding of stock that larger returns may be attained. Our cities and more progressive villages are making very large investments in the education of their boys and girls, believing that no money spent for the public brings such large returns as that invested in education. It is common knowledge that the farmers of our county are very prosperous. Is there any good cause why they should not have the best modern school for their children?

In comparing the cost of a consolidated-school system with a one-room system, there are several facts other than the total cost to be considered. One fact is the per capita basis for cost, which is an accurate method of comparison. Let us compare Monroe township, which is centralized, with the nearest one-room school, sub. district No. 10, in Washington township. In Monroe township the average annual cost for both tuition and transportation for each child in the elementary school is \$37.62. In the above-mentioned one-room school in Washington township, where the enrolment is 11, the average annual cost for tuition is \$50.90. Another fact to be kept in mind is that attendance of children in consolidated schools is much better and more regular. The attendance in Somers township was 81 per cent for the last year under the one-room system; the next year under the consolidated system the attendance was 92

per cent. With several hundred pupils enrolled an increase of 11 per cent in attendance means that the total amount of schooling was increased many hundreds of days. In one month one rural school had as many cases of tardiness as the whole consolidated school had in the whole year. Not only is there the loss of school attendance but the work of the school is greatly crippled by the irregular attendance of children. Another fact to be considered is that boys and girls remain in school longer. The enrolment of both upper grades and the high school increases when schools are consolidated. In most of our consolidated schools the high-school enrolment has more than doubled. This increased attendance in high schools has a money value of almost unbelievable size. What shall we say of the value to the boys and girls in greater usefulness and happiness? Still another fact to be considered in comparing costs is the greater interest in school work. The value of interest in one's work cannot be estimated in dollars and cents, and yet it is of the highest value. Many a child has quit school because the work was poor and uninteresting. The larger teaching force, better building and equipment, larger number of pupils, and more work with things of vital interest as found in the consolidated school are surely bringing a more abundant life to many communities. Then transportation saves for parents in clothes and shoe-leather. One mother in a centralized township in this county estimated that her family was saved not less than \$25 a year in this way. All of the above facts must be kept distinctly in mind when we compare costs of consolidated and one-room school systems. In this progressive age who wants cheap rural schools?

In this chapter there is no space for a discussion of such value of the consolidated school as building, equipment, play, auditorium, socialization, better teachers, better class-work through division of labor, modern curriculum, and closer supervision. They are treated in other chapters.

In general, it can be asserted truthfully that consolida-

tion improves the whole community. Land values increase because of better school advantages. Such a school draws the people of the whole township together and awakens a deeper interest not only in the school but in every activity of the community. It helps to keep people in the country. It brings better roads. The old-time one-room school must give way to something better, to a more efficient school in keeping with the progressive age in which we live.

Social.—The consolidated school has an enrolment large enough to give the social and cultural contact with agreeable associates necessary for the best development of every child.

The social life which one time centred around the country school in spelling-bees, debating, singing-schools, etc., has passed. The drift of the country population to the city is partly social. To-day the social life of the rural community must be reconstructed. The new social life will find its best centre in the consolidated school. Here will be held farmers' institutes, lectures, concerts, socials, and entertainments of various kinds. The schoolhouse has been a monument of neglected opportunity. It is used by about one-fifth of the people about six hours a day for about half the days of the year. The people pay taxes for the school and it belongs to them; they should use it more. It is too valuable to stand idle so much of the time. The large auditorium and gymnasium offer facilities for gatherings, both social and recreational, which cannot be obtained in the small school. In this day of good roads, telephones, automobiles, and traction-cars, a township is a social group no larger in area than was the subdistrict fifty years ago. The larger social group has many advantages. More talent is found for conducting social and recreational events, and the whole township is united as never before. The centralized school is a great means of developing a spirit of co-operation among the people of the township. As the people of the various communities become acquainted at the school

meetings, a feeling of fellowship and common interest is developed which is of much value to all. A township library may be maintained at the school building. The data given below should be noted for the purpose of comparing the community work of the consolidated school and the one-room school.

Community Meetings.—In the past three years a great many community meetings have been held by the schools. With all schools under supervision and nearly all consolidated, the number of community meetings has increased many hundred per cent, and this movement will increase in extent and effectiveness. The resulting advantages to both school and home are invaluable. Some results are entertainment and recreation, intellectual improvement, moral uplift, social intercourse, encouragement and inspiration in one's daily vocation. A comparison between townships with one-room schools and consolidated townships is very interesting in showing the value of the consolidated school in socializing the community. In a period of five months' time last winter our records show that Twin township with one two-room and eight one-room buildings had 890 persons present at community meetings, while Lanier township, her neighbor on the south, a centralized township, had 2,625 present. Compare the amount of money raised to help the school. The uncentralized township received \$3.75 and the centralized school received \$255.90. The two townships have about the same school population, and are of the same area.

Washington and Jackson are two adjoining townships. Washington has eight one-room schools, while Jackson is centralized. In topography, occupation, and wealth they are very similar. Washington's school population is just a little larger. Jackson, the centralized township, held 20 school and community meetings, with an attendance of 2,833, and received \$183.20 to improve the school; Washington, with her one-room schools, held 18 meetings, with

an attendance of 657, and received \$10.30 for school improvement.

Every school should have a permanent organization such as community club, literary society, parent-teachers' association, mothers' club, country life club, singing school, reading club, etc. In almost every community there is much music talent, dramatic talent, and speaking talent going to waste. And how important it is to give the opportunity of expressing this talent, especially among young people.

The following brief summary of school and community meetings held in the schoolhouses in the last five months of the school year from January 1, 1917, to June 1, 1917, is taken from reports submitted by the superintendents. The character of these meetings was quite varied. The more important meetings were entertainments by the school, interschool literary contests, illustrated lectures by the school, community patriotic sings, class plays, commencement exercises, interschool athletic contests, lyceum numbers, socials, spelling schools, class parties, teachers' associations, junior receptions, parent-teachers' meetings, school

School	Superintendent	Number of Meetings	Number Present	Receipts
College Corner.....	L. D. Brouse.....	10	1,190	\$245.50
Dixon township.....	J. W. Smith.....	6	960	86.55
Gasper township.....	E. E. McClellan....	12	494	34.65
Gratis.....	E. E. McClellan....	5	950	245.00
Harrison township.....	Reuben Koch.....	18	1,212	6.20
Israel township.....	E. E. McClellan....	5	762	91.50
Jackson township.....	C. R. Coblenz....	20	2,833	183.20
Lanier township.....	E. E. McClellan....	15	2,625	255.90
Lewisburg.....	H. A. Hoffman....	14	2,935	270.50
Monroe township.....	L. F. Schieser....	22	2,600	200.00
Twin township.....	Reuben Koch.....	12	890	3.75
Verona.....	Reuben Koch.....	7	1,025	36.00
Washington township.....	Reuben Koch.....	18	657	10.30
West Alexandria.....	C. A. Matheny....	17	6,505	736.85
West Elkton.....	E. E. McClellan....	8	1,415	200.00
West Manchester.....	Reuben Koch.....	1	250	50.00

exhibits, farmers' improvement associations, mothers' meetings, and school home-comings. Many Red Cross meetings and farm bureau meetings were held in the school buildings. In the report below, lyceum lectures are given if the lyceum course was conducted by the school. Admission was charged for some of the meetings and the receipts are for such meetings. Of course, many of the meetings were free. One school used 800 slides with their stereopticon in community work.

Supervision.—The consolidated school has the advantage of more and closer supervision. In such a school the superintendent may inspect the work of the teacher every day. He can give the advice and help to the teacher just when it is needed. He can take care of cases of discipline at once. The superintendent of the one-room schools necessarily must lose much time in travelling to and from schools, and he cannot be in as close touch with the work as the superintendent of the consolidated school.

The above facts must be kept distinctly in mind when we compare costs of consolidated and one-room school systems. In this wealthy country and in this progressive age, who wants cheap schools?

Transportation.—When consolidation is first broached in a community, it is found that conveyance of the children is responsible for much of the opposition. Many fail to see the numerous advantages of the larger school which can be secured only by conveying the children. As shown in the preceding chapter, where consolidation has been tried for a few years, 90 to 95 per cent of the patrons give it their hearty support. This system has been thoroughly tried out in many States and is proving a great success.

Some children live two miles from the one-room school. Who has not seen them trudging home through mud and snow as the shades of night were falling? A prominent farmer in Washington township near the Monroe line lives

two miles from the nearest subdistrict school in his township and four and one-half miles from the Monroe township centralized school. He recently said that his boy started for school in the morning at the same time a Monroe township school wagon came past his place. The boy arrived at school about the same time the wagon reached its destination. In the evening his boy arrived home about ten minutes before the wagon arrived. This farmer at one time opposed centralization, but now has petitioned to be transferred to the Monroe consolidated school nearly five miles away.

It is rather strange that farmers living within a few miles of transportation routes of consolidated schools will not go near enough to investigate rumors about unsatisfactory hauling of school children, but will believe some wild statement of some irresponsible person about transportation in such a system. No sensible person expects perfection in a system that involves so many persons and conditions. On the other hand, let us not forget the disadvantages of walking to the one-room school.

A route travelled by a school bus drawn by a team should not be over six miles long from the place where the first child enters the wagon. If possible it should be less. No child should enter the school wagon earlier than seven o'clock, standard time. On shorter routes the time should be later. Wagons should not vary in the time of starting regardless of roads and weather. It is better that the opening of school be delayed a few minutes than for wagons to be irregular in time of starting. Every parent should have a time schedule at home showing exactly when the wagon is due to arrive at his home. Many wagons in our county run so regularly that they are not more than two or three minutes off schedule for many weeks at a time.

It is likely that in a few years most of the children in this county will be carried to school in motor school cars. The motor-car has many advantages over the wagon drawn

by horses. Of course, the chief advantage is that a route can be travelled by the motor-car in less than half the time it takes a team. Such cars are being used successfully in several States where roads are not as good as they are in Preble County.

In our centralized townships more than 60 per cent of the children ride but three miles or less. The children like to ride. The wagons are enclosed with glass sides, have cushioned seats, and are heated and ventilated. The children are protected from cold, rain, snow, and mud.

Drivers of wagons sit inside and have the same control over pupils as the teacher and are under bond to give service according to contract. The drivers should be men carefully selected.

Transportation of children does away with fighting, bad language, and other misconduct on the way to and from school.

There is a saving to parents in clothes and shoe-leather. One mother in a centralized township in this county estimated that their family was saved not less than twenty-five dollars a year in this way.

To convey children to school makes the attendance far better. Hear what one farmer says: "Think of the little children plodding schoolward in cold and wet and mire—when they go at all! Then count up the number of days they are kept home altogether because of bad roads and severe weather!" Read what the records show in one township of this county the next year after the schools were consolidated: "The consolidated system of managing the schools showed many improvements over the old way. One of these was in attendance. The attendance the last year of the rural schools was 81 per cent, while this year it was 92 per cent—an increase of 11 per cent. Another was in regard to tardiness. During the last year of the rural schools in one month in one of the schools there were thirty-three cases of tardiness. This year, under the consolidated sys-

tem, we had scarcely that many for the entire year." Who can figure the value of such an increase in attendance and punctuality?

In general, it can truthfully be asserted that consolidation improves the entire township or consolidation area. Land values increase because of better school advantages. Such a school draws the people of the whole township together and awakens a deeper interest not only in the school but in every activity of the community. It helps to keep people in the country. It brings better roads.

The old-time one-room school must give way to something better, to a more efficient school in keeping with the progressive age in which we live. The answer is consolidation.

III. IN RANDOLPH COUNTY, INDIANA

Randolph County is situated in the east-central part of Indiana. Its surface is somewhat level, being, however, easily drained, making good roads easy to secure.

Consolidation first began in this county at Losantville, Nettle Creek township. The school authorities thought it wise to transport two small district schools to this place. Although this brought about a storm of opposition, the experiment was tried and has proved a great success. The building was erected in 1905, and is of concrete, costing \$14,000. It has since been equipped at a cost of about \$1,000, including desks, globes, maps, library, laboratories for manual training, cooking, sewing, and agriculture. For the first time in the history of the county schools the flush system of toilets was installed in a township building. A high school was established with a three years' course of six months each. This has been increased to a four years' course of eight months, and is now a commissioned school, meeting state requirements. From the very first this school has been a success, which is shown by the fact that 94 per

cent of the eighth-year graduates have entered high schools.

The school corporation of Lynn was laid down, and the township took charge of its school and built a six-room building at a cost of about \$24,000. At the dedication of this building Doctor Hurty, of the State Board of Health, in making an address, spoke of the "large and commodious building, sanitary in every part, large enough to meet the needs of the community for years." The people of the community, realizing the advantages of such a school, abandoned two of the district schools, and it became the duty of the same Doctor Hurty to condemn the building because of its lack of room in 1909. A six-room addition was built to meet the growing needs of this school, but again we find an insufficiency of room, as the building is now crowded in every part. This shows the importance of planning for all extensions at the start, an object attained readily by means of the one-story school as shown in Chapter IX. Laboratories for physics, botany, agriculture, manual training, sewing, and cooking are installed. From a school requiring but six teachers and having a high-school course of three years this one has quickly grown to a school requiring thirteen teachers, and is commissioned. The enrollment of eighth-year graduates has increased from 80 per cent to 97 per cent.

In 1912 five districts in the north part of this same township petitioned the trustee to abandon the district schools and consolidate them. To this end the Beech Grove, a \$15,000 five-room building, was erected in 1912.

In 1908 a four-room dilapidated, insanitary fire-trap of a schoolhouse in Greensfork township gave way to a modern ten-room building. This building is not only sanitary and modern in every particular, but is an architectural beauty. It is situated in a maple-grove near the centre of the township, and accommodates the pupils from six districts.

The high school maintained here has grown from a three

years' course of six months to a four years' course of eight months, and was commissioned in 1911. The per cent of attendance of the eighth-year graduates has increased from 60 per cent to 97 per cent since the erection of this building.

In 1908 the trustee of White River township found himself facing the problem of several small schools and poor buildings in the western part of his township. It was deemed advisable to build a consolidated school. To this end a four-room building was erected at a cost of \$14,000. Many people looked upon it as a foolish undertaking, as it is situated entirely remote from any town or village. In fact, at the dedication of this building, known as the "Lincoln," prophets were heard to say that the time would never come when the building would be half filled. This school began with an enrolment of 43. Its advantages were soon seen by the people of the surrounding districts, and the following year three heavily populated districts petitioned to be abandoned and transported to this school. Many others from surrounding districts, also, seeing its advantages, transported their children at their own expense. This reduced the attendance in the other schools until three went down for lack of attendance. The high school was established in 1910, and is now commissioned.

The experiment was so successful and the attendance so large that the building soon became inadequate. As some of the high-school children were transported from the east end of the township, it was thought that the situation might be relieved by erecting another large building in the eastern part of the township. This was done in 1911, but so great was the demand and need of more room in the "Lincoln," that 97 patrons out of 101 petitioned the trustees and advisory board to double the capacity of the school building. This was done in the summer of 1912, and instead of a failure, as was predicted by some, we find it a ten-room building equipped for botany, agriculture, manual

	CHILDREN IN SCHOOL	SCHOOL PLANT	EXPENSE PER CHILD	SCHOOL DAYS PER CHILD	SCHOOL YEAR	ATTENDANCE	EXPENDITURE AND WEALTH	DAILY COST	HIGH SCHOOLS	SALARIES
1 WASHINGTON										
2 MASSACHUSETTS										
3 NEW YORK										
4 CALIFORNIA										
5 CONNECTICUT										
6 OHIO										
7 NEW JERSEY										
8 ILLINOIS										
9 COLORADO										
10 INDIANA										
11 RHODE ISLAND										
12 VERMONT										
13 NEW HAMPSHIRE										
14 UTAH										
15 OREGON										
16 MONTANA										
17 MICHIGAN										
18 N DAKOTA										
19 IDAHO										
20 MINNESOTA										
21 IOWA										
22 MAINE										
23 PENNSYLVANIA										
24 KANSAS										
25 NEBRASKA										
26 S DAKOTA										
27 NEVADA										
28 WISCONSIN										
29 WYOMING										
30 ARIZONA										
31 OKLAHOMA										
32 MISSOURI										
33 W VIRGINIA										
34 FLORIDA										
35 DELAWARE										
36 MARYLAND										
37 TENNESSEE										
38 TEXAS										
39 LOUISIANA										
40 NEW MEXICO										
41 VIRGINIA										
42 KENTUCKY										
43 ARKANSAS										
44 GEORGIA										
45 MISSISSIPPI										
46 N. CAROLINA										
47 S. CAROLINA										
48 ALABAMA										

Rank of States in Each of Ten Educational Features, 1910.

White indicates that the State ranks in the highest 12 of the 48—Black ranks in the lowest 12.

training, sewing, cooking, and attended by 257 pupils. There are five acres in the school lot. This does not include a one-acre lot upon which the school residence is located.

The other building referred to in the above paragraph is known as the "McKinley," and is situated on a six-acre lot one mile east of Winchester. It is an eight-room building, costing \$28,000, modern in every particular, and fully equipped for all the needs of a modern school. Pupils of seven abandoned schools are being transported to this building. The enrolment for the current year is 215. The high school maintained here is also commissioned.

For five years previous to the establishment of the township high schools in this township the enrolment of eighth-year graduates was 53 per cent. Since these high schools have been started, 93 per cent of the eighth-year graduates have been enrolled in the high school.

In 1909 Parker abandoned its school corporation, and its management was assumed by Monroe township. A new building was necessary. Four acres of ground near town were purchased by the trustee, and a building costing \$34,500 was erected. This is also well equipped, maintains a commissioned school, and has twelve teachers. The children in the western half of the township are transported by wagons and interurban trolley-car to this school. This building is equipped for manual training, sewing, cooking, botany, agriculture, and physics. The per cent of attendance of eighth-year graduates has increased from 67 per cent to 90. The children in the eastern half of the township are transported to Farmland joint consolidated school. This building was erected in 1908 at a cost of \$45,000. It is equipped similarly to the one just described.

The banner year for schoolhouse construction was 1910, when three townships erected consolidated buildings.

Green township erected a six-room \$19,000 building upon a three-acre school lot in the centre of the township.

This was the first township in the county to have complete consolidation. All of the eight schools were abandoned and transported to the central school. For five years previous to the establishment of this school but 21 per cent of its eighth-year graduates enrolled in high school. This low per cent is perhaps due to the fact that no high schools were near this township. The growth of this school has been remarkable, and a four years' commissioned high school is maintained. The per cent of attendance of the eighth-year graduates has increased from 21 to 92 per cent.

Jackson township is another that built in the year 1910. Its building was erected in the centre of the township, and, like the others, is modern in every particular. It had six rooms and was built at a cost of \$18,000. Two rooms were occupied the first year, but in 1912, every nook and corner being filled, a three-room addition was built. This building, like the others in the county, is complete in every respect. Consolidation of the township is complete. The high school is commissioned and has an attendance of 63 pupils.

Ward township had a high school at Saratoga previous to the year 1910, but Saratoga is in the extreme corner of the township, which made the high school inaccessible to most of the children of the township. Two schools abandoned for lack of attendance, together with three abandoned by petition, were centralized in the "Jefferson," near Deerfield, in the western part of the township. This building has six classrooms and two recitation rooms, and was built at a cost of \$17,000. The high school is now commissioned and is growing very rapidly. The attendance of eighth-year graduates in the territory covered by this school has increased from 31 per cent to 92 per cent. An addition is now being built.

In the spring of 1911 the State Board of Health condemned the joint school building between Nettle Creek and West River townships at Modoc, and the trustees of these

townships built a seven-room building at a cost of \$18,000. During the summer three district schools petitioned to be abandoned and consolidated with the school at Modoc. The high school, which had been a two years' course of seven months, was put upon a commissioned basis immediately, and has grown from an attendance of 15 to 40. The school is now commissioned, and the per cent of enrolment of eighth-grade graduates in the territory covered by this school has increased from 68 per cent to 96.

At the same time in which the Modoc school building was condemned another structure in West River township at Huntsville was also condemned, but the Board of Health, realizing that a township would be burdened by erecting two buildings during the same year, extended the time of condemnation to 1912. In the summer of 1912 a four-room building was erected at Huntsville at a cost of \$15,000. This school, like the one at Modoc, has been increased from a two years' course of seven months and placed upon a commissioned basis. Pupils of four abandoned schools are being transported to this school, leaving but two district schools in the township. The eighth-year enrolment has increased from 68 per cent to 92 per cent.

In the spring of 1912 four districts in the central part of Wayne township petitioned to be abandoned and consolidated in a central school. To this end five acres of ground were purchased and a contract let for a seven-room building at a cost of \$23,000. The old school building is converted into a teacherage and is occupied by the principal of the school. The school has an attendance of 225. The high school is commissioned, with an attendance of 40. The per cent of enrolment in the high school has increased from 44 per cent to 95. A seven-room building is now being built in the northern part of this same township. All of the district schools have been abandoned.

The last building to be constructed is in Stony Creek township. This is an eight-room building, like the other

schools, equipped in every particular for complete community service.

Construction.—In mentioning the number of rooms in each of the buildings named above we have made no attempt to enumerate such rooms as might be termed recitation, library, laboratory, rest, or play rooms. Each building has from two to six such rooms, which are as valuable in their place as the rooms mentioned in the description. During the war building ceased, of course.

These buildings have been built according to the rules and regulations of the State Board of Health, as to lighting, heating, and ventilating. The heating is by furnace and steam, the ventilation being by fans. Automatic regulation is installed in most of these buildings, thus insuring a constant temperature. The flush system of toilets is made possible by cesspools, which are easily drained, and which have proved very satisfactory.

The cost given is in most cases the contract price, and does not include any improvements or equipment.

In some cases the old school buildings are used for barns and in others new barns have been built. These are used for the horses of the hack drivers and of children who furnish their own transportation.

These barns are constructed so that by removing a temporary stall the school hacks may be stored during the summer.

Transportation.—The greatest problem in consolidated schools is the transportation of the children. The testimony in preceding chapters is convincing and sufficient. Emphasis has been laid on securing the best men as drivers with the best teams to be had, and these attached to the best hacks possible. Too great care cannot be taken to insure the best service in this line. The hack routes must be as short as possible, so that children may be in the wagons for a minimum period only. The hacks should be commodious, warm, and well ventilated. To this end the

trustees of this county are purchasing only hacks that have glass sides and ventilators. They should be heated by coal-stoves and thus eliminate any fumes.

The glass sides give good opportunity for ventilation and insure plenty of light, both of which are not only essential to good health but are conducive to good deportment. Hack drivers who formerly drove the hacks with curtained sides report that the discipline in the modern hacks is much better. This is due largely to the fact that the hacks have plenty of light, and that the children can see over the country as they pass along. This is also an insurance against accidents while crossing railroads.

The hacks used here have double floors, which also adds much to the comfort of the children.

To reiterate, good roads are a necessity to successful transportation. Since these hacks have to go over the roads at all times of the winter, they are equipped with wheels having two-and-one-fourth-inch tires, to prevent any unnecessary wear upon the road. Hack routes, like mail routes, bring about good roads, since the best service is only possible under the most favorable conditions.

Only men of the highest moral worth should be employed as drivers. As much care should be exercised in the selection of a hack driver who has charge of the children to and from school as in the teacher who has charge of them while in school. The best of men can only be secured when the position pays the price demanded by a first-class man. Bids for driving a hack should never be taken by a trustee, as this brings about unsatisfactory complications.

The rules and regulations of the hack service should be a part of the contract into which the hack driver enters and in which he gives bond for the successful performance of the work. The contract here shown is the one used in this county, and attempts to reach and overcome some of the difficulties encountered in the past.

Each hack driver is required to make a daily report to

the principal of the school. This not only secures his co-operation but the children in this way learn of their responsibility to the driver. A report is also required of each driver to the county superintendent in order that he may be made acquainted with prevailing conditions.

Community Centres.—These buildings are constructed for a broader purpose than mere school buildings. They have become the centres of community interests because of their facilities for the accommodation of public gatherings. Many of the townships have no other public buildings of sufficient size to accommodate general meetings of the community. Without exception these buildings have auditoriums which are made by combining two to four rooms, and sometimes the corridor. Folding-doors of unusual height are used for this purpose. These auditoriums vary in size, depending on the size of the building, but in most instances will seat 300 to 600 people. These facilities have brought about many entertainments such as are given in lecture courses of high quality. Commencements, township institutes, both teachers' and farmers' political meetings, Sunday-school conventions, farmers' organizations, parents' and teachers' meetings—in fact, all meetings found in any high-grade community are being held in these buildings. This has brought about a closer relation between patrons, children, and the schools, and this alone is well worth the extra cost of any auditorium.

These schools have also brought about a higher appreciation of school work beyond the eighth grade. Families are now represented in the high schools of the townships which were never represented before. Children no longer discuss the question of stopping at the eighth grade, because they have in their own midst an institution of higher learning. We know of no more convincing proof of the above-mentioned influences than a reference to the statistical report of this county. In 1908-9, the year before these schools were started outside the towns, this county had 371

eighth-grade pupils enrolled, 61 high-school pupils, in commissioned high schools. In 1915-16, by a strange coincidence, the report shows the same number of eighth-grade pupils, but the enrolment in the high school has increased from 61 to 657. Eighty-seven per cent of the pupils of the townships of the county are in consolidated schools.

This influence not only reaches to those of the eighth year, but extends entirely throughout the grades, and the general attitude of these lower grades toward the schools and school problems is perceptibly better. As one reflects upon the schools of the past and compares them with those of the present with all their advantages, the question arises: "What great things are in store for the children of the next generation?"

IV. JORDAN CONSOLIDATED RURAL HIGH SCHOOL

The Jordan school district is situated in the southern part of the fertile Salt Lake Valley, nine miles south of Salt Lake City, Utah, and embraces within its boundaries 2,800 square miles of territory, which includes the following communities: Bingham, Riverton, Sandy, South Jordan, Union, West Jordan, Bluffdale, Butler, Crescent, Draper, Granite, Herriman, Lark, and Midvale; it is traversed by the Oregon Short Line, Denver and Rio Grande, Bingham and Garfield, San Pedro, Los Angeles, and Salt Lake Railroads, and the Orem Electric Interurban Line.

The district is reached and traversed for a short distance by the Utah Light and Power Railway Company, which is the street railroad operating in and around Salt Lake City. There are 100 miles of railroad in the district. The assessed valuation of the district in 1918 was \$49,000,000; population estimated, 20,000; the school population was 5,307.

The school district maintains two high schools, the Jordan high school at Sandy and the Jordan high school at Bingham. The latter accommodates the students of the two mining towns of Bingham, population 5,000, and Lark, population 500; the remaining part of the district being largely agricultural, supports the Jordan high school at Sandy.

The building shown elsewhere is the home of the Jordan high school at Sandy. It stands near the geographical centre of the Jordan district, the southern part of Salt Lake County. It is 235 feet long by 166 wide and 45 feet high. It contains 40 large, well-lighted rooms, adapted to various high-school activities. The auditorium is 60 feet by 90 feet, has a large stage, a commodious balcony, and is equipped with 900 opera-chairs of the best design. It is well adapted for assemblies and dramatic activities. The gymnasium is 60 by 90 feet, the standard size, and has a balcony for spectators, a balcony music-stand, and commodious dressing-rooms and showers adjoining, for both boys and girls. The building is well adapted to social and physical activities. The study hall is a well-lighted room containing 100 seats of the best modern type; adjoining the study hall is a small but very choice library. Besides the rooms described, there are 35 rooms adapted to recitation and laboratory work. These have been especially designed for domestic science, domestic art, mechanic arts, agriculture, physics, chemistry, biology, and other classroom activities. The building is thus well adapted for modern high-school activities.

The heating and the ventilating plants are likewise well equipped. The former has two 80 horse-power boilers that are fed by electric stokers. The latter has a large electric fan connected by air-ducts with all the rooms. The boilers heat the rooms by means of steam radiators, while the fan draws in pure air from a height of 25 feet on the outside, and sends it warmed to all parts of the building. The tempera-

ture is regulated automatically, so that it ranges constantly between 65 and 68 degrees Fahrenheit.

The campus has twenty-three acres of ground. This is devoted to agriculture and to athletics. A small model dairy farm is maintained in connection with the courses in agriculture. Football-courts, tennis-courts, baseball diamond, and running courses are laid off for use in athletics and sports. Around the building the ground is devoted to appropriate landscape-gardens. On one corner of the campus is a new brick cottage for the principal and another for the superintendent of schools; another corner is occupied by the custodian, who is engaged the year round and supervises the building and grounds.

This plant is that of a consolidated rural high school. Located in the open country as it is, it is not in any sense local. The nearest community, Sandy, is one mile away. Other communities that patronize the school range from one up to twelve miles distant. These communities separately are too small to maintain a first-class modern high school; conjointly in consolidation they have established one of the largest and best high-school plants in the State.

The cost of this plant has been high. To date the sum expended is about \$165,000. When completed it will go over \$200,000. This could not be met even by all the prosperous communities of this district by direct taxation, so the district was bonded, thus giving the generation that receives the educational benefit an opportunity to help pay the expenses. Consolidation and bonding thus enable the building of big institutions without the assumption of an unbearable burden.

This building will accommodate 750 students. It will probably meet the needs of the district for the next eight or ten years. The school now enrolls about 400 students. We present herewith the names of the contributing towns with distance from the school and approximate population.

Town	Distance in Miles	Approximate Population
Midvale.....	3	1,100
Union.....	3	700
Butler.....	6	400
Granite.....	5	275
Sandy.....	1	1,075
Crescent.....	3	350
Draper.....	5	900
Bluffdale.....	7	250
Riverton.....	6	975
Herriman.....	12	300
South Jordan.....	3	600
West Jordan.....	5	900
Welby.....	7	100

The transportation is free and is carried on by the district mostly in automobile vans.

Coming as these students do from small communities, ranging from 1,000 inhabitants down to 100, high-school opportunities would not have been accessible to them had it not been for consolidation.

The school is large enough to give breadth of scope to its activities. It has the usual social and athletic activities. In addition it has a broad curriculum, flexible enough so that students can find something to fit their native bent.

The school here represented and all the elementary schools that feed it are administered by a board of five broad-minded men who work not for particular constituencies, but for the people of the entire county.

Under the old district system over fifty men as trustees would have administered separate schools without even a possibility of high-school work. This administration of the education of all these communities with one central high school by a board of five big men who engage a competent superintendent is attained in these rural communities only by means of consolidation.

Consolidation thus enables rural communities to estab-

lish modern high schools. The plant including campus, building, and equipment is of the best type. The curriculum is broad enough in its scope to give opportunity for the development of individuality. The curriculum and social activities of the school are adapted to the environment and to the needs of the community. Without consolidation high schools of any sort are beyond reach of the smaller communities. The so-called one and two teacher high schools in the slightly larger communities are not modern, because, even if the administrators are converted to modern ideas, they are limited in their power and cannot embody the features named above that characterize a modern high school. Schools may exist in the twentieth century in country or in city and not be modern. But, with the proper view-point, and with an enabling law such as is now in effect in our State, a modern high school ought shortly to be within reach of every eligible child in Utah. For other counties and States it may be better to have several consolidated schools in each county and not have such large, separate county high schools, but here the people nearly all live in the towns mentioned, not in the open country, and the little children are well cared for in the elementary town schools. We have met the situation as we found it, and have an almost unique high school.

V. THE SARGENT CONSOLIDATED SCHOOL AND COMMUNITY CHURCH, COLORADO

One day in the summer of 1916 more than 100 people from two communities in Rio Grande County who were interested in consolidation visited the La Jara consolidated school. The trip was made in autos and some of the people came more than 50 miles. They took lunch-baskets and spent the day inspecting this remarkable school. At noon they were served hot coffee and cocoa by the domestic-science class. After a pleasant and profitable day they re-

turned home. One of the communities is situated eight miles north of Monte Vista. All were convinced of the merits of consolidation. An election was immediately called in five districts and carried by an overwhelming majority. By this time it was too late in the summer to think of getting a new building ready for the approaching school year, so school was opened in the old buildings while the school board was completing its plans. In February, 1917, a bond issue for \$35,000 carried without opposition, a competent architect was employed, plans were drawn, a ten-acre site was donated, the contract was let, and building operations were begun. In the summer following, a superintendent was employed who had already made a reputation for starting one famous consolidated school, and from this time on everything moved like clock-work. People living in adjoining districts saw this fine school nearing completion and were anxious to share its benefits. In a short time four large transfers of territory from contiguous districts were added by petition, making the equivalent of nine districts in the enlarged consolidation. Never in the history of rural-school improvement in Colorado have such united efforts been put forth to complete a school building, nor has such enthusiasm been displayed or more complete and hearty co-operation been shown in any community than there was in this case.

It takes time to complete such a building as this, and it was not until January, 1918, that the new building was occupied, being then unfinished. It was dedicated and christened April 23, at which time fifty autos were parked on the campus, and more than 300 enthusiastic country people were packed into the large school and community auditorium to witness the event to which they had looked forward with so much pleasure.

This fine modern \$35,000 school building was scarcely finished when another bond issue for \$18,000 was voted. From this, an eight-room building was erected to serve as

a home for the superintendent. A ten-room teacherage for the other eight teachers and a garage 40 by 70 feet were constructed and a gymnasium was finished in the school basement.

In this, one of the most modern and up-to-date rural-school plants in the United States, \$72,000 have already been expended. These people have not only provided for the present, but have anticipated their future needs for years to come.

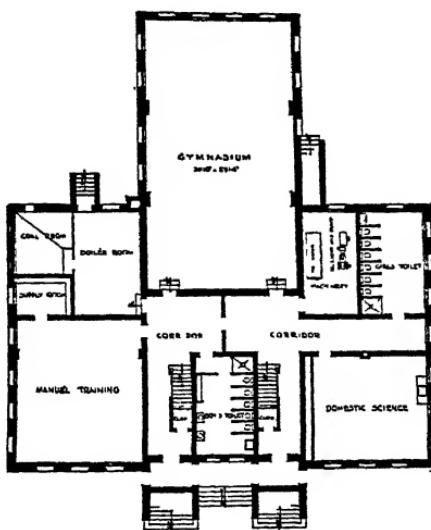
The building itself is complete in every detail. It is a beautiful structure, well designed for all the lines of work that should be carried on in a modern rural school. It has standard classrooms sufficient to accommodate 500 children. It has a large school and community auditorium for both school and neighborhood meetings. It has well-equipped agricultural and domestic-science laboratories and a manual-training shop, these three lines of work being introduced the first year. Thirty boys, each of whom owns a registered gilt, have organized a pig club. Already pig-pens and chicken-coops dot the rear of the ten-acre school site. A gasoline-engine furnishes water under pressure for drinking-fountains, lavatories, and toilets, and generates electricity for lighting the building as well as for charging the storage batteries of the auto-busses used in transportation. It is still further utilized as laboratory equipment in the study of electricity and auto repair.

Two hundred and eight children enrolled the first year, 30 of these being in the new high school.

About 350 school children now live in the district, and it is estimated that over 300 of these will be in school next year with about 50 of the number in the high school.

Last year 180 children were transported to and from school in five large Studebaker busses, a few riding 14 miles each way. Three more busses of the same kind have been purchased, and next year at least 300 children will be transported.

All of the nine teachers, each of whom has had either college or normal training, are nicely and comfortably provided for in the two large new teacherages. No more itinerant teachers, coming into the district Monday morning and returning to some town early Friday afternoon,

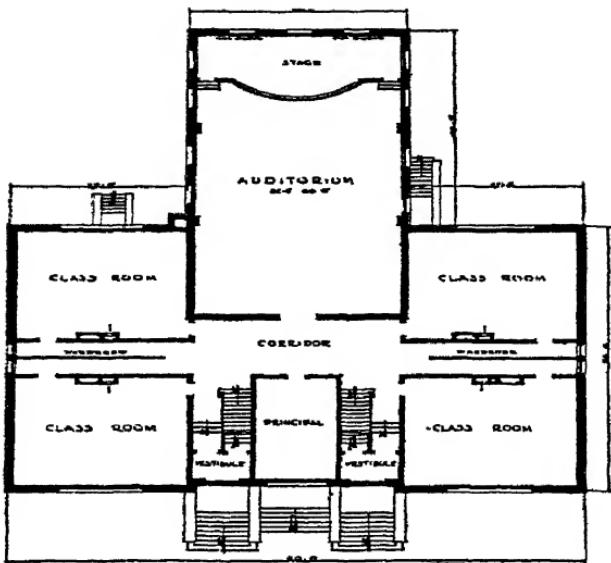


Basement Plan of Sargent Consolidated School.

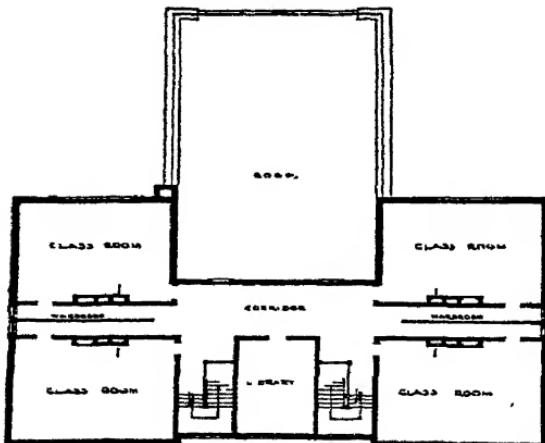
will be tolerated in this district. They will be expected to live in the district and to identify themselves with the community life therein. Moreover, each teacher will be employed because of special preparation and fitness for work in a rural school and rural community. The superintendent is a young man with a vision and has already earned a reputation as a community builder.

This school has also been approved for federal aid in home economics under the Smith-Hughes Act.

Community Co-Operation.—The people of this remarkable district have not been content in just improving their school, even though that improvement far surpasses any



First Floor Plan.



Second Floor Plan.

Sargent Consolidated School, Monte Vista, Colorado.
John J. Huddart, Architect.

other district of which we know, but they have already actually gone clear "over the top" in community co-operation. As soon as the new building was occupied, they organized a union Sunday-school, which grew in attendance rapidly until on Easter Sunday the enrolment was 299, the average Sunday attendance being in the neighborhood of 225, with a men's Bible class of 40, a women's Bible class of the same number, and a cradle roll of 30, which seems to guarantee future attendance.

The next step was the organization of a union community church. A pastor who gives his full time to this field was called and his salary of \$1,500 was raised by voluntary subscriptions. He reached the field in April, 1918, and began work at once. The church organization was perfected in May, and on June 9, 70 members, representing some ten or a dozen different denominations, were received into membership, 11 of these being upon confession of faith. On July 7, 20 more were received into membership in the new church, making a total of 90 members. Twenty-four of these are adult males and 38 adult females. There is also a Christian Endeavor Society with an attendance of 50-.

This magnificent rural-school building is used five days in the week during the school term for the regular school work, and on Sunday for Sunday-school and church services. The large assembly-room is used for preaching services and the classrooms for the Sunday-school classes. It is admirably adapted to serve this double purpose, thereby effecting a great saving to the people of the community, who do not need to expend additional money for a separate building which could only be used a few hours each week. Besides, the fact that the church services were to be held in the school-house, a neutral building, open to and belonging to everybody in the district, made it easier for the people to forget their denominational differences and unite in one organization, to worship at one altar and to bring up their children in the "fear and admonition of the Lord," instead of trying

to maintain some half-dozen competing organizations, none of which could ever hope to be strong enough to be self-supporting. For if any one of these had ever tried to erect a building of its own it must have solicited the support of the entire community, and then have had a building similar to some of the old schoolhouses which they have already abandoned.

One year ago this community had only one-room schools, a struggling little Sunday-school with but few in attendance, and no church organization. There was no central community meeting-place and no community solidarity. To-day these people have a modern school plant and an efficient school organization, a community church and Sunday-school that all can take pride in helping to support, and the entire community is learning to co-operate in the solution of its problems. The parsonage has been completed, making the total cost of this real consolidated-school plant to date about \$72,000. The people seem to be a unit in the support of both the school and church, and no objection has yet been raised to bond issues or tax levies. The people seem to have real inspiration, the kind that is contagious, for other communities near by, seeing the good work already accomplished by this district, are planning to do likewise, and one large consolidation north and two south of it are now developing. This is perhaps the most conspicuous example of complete community co-operation that can be found in Colorado. They have made more real substantial progress in two years since the movement first started than many rural communities make in a quarter of a century.

VI. CONSOLIDATION PLAN MAKES GOOD

Each successive year for nine years consolidation has become more favorably fixed in the minds of the people until now, in Granite school district, Salt Lake County,

Utah, opposition to it is considered a thing of the past. Looking backward upon these years of experience, it can be said that consolidation has accomplished, among other things, the following:

1. Established a deeper confidence in the schoolman's most vitalizing agency.
2. Brought first-class schools to the country pupils and overcome the necessity of country pupils leaving their homes to go to city schools.
3. Made homes in the country more desirable and thereby raised the value of rural real estate.
4. Erased boundary-lines and worked for the common good of all the people.
5. Stimulated the "getting-together" habit.
6. Introduced the "transportation idea" and supplied better means of travel.
7. Caused, and is causing, better roads to be built.
8. Equalized taxation for school purposes and the advantages which result therefrom.
9. Provided more funds for school purposes.
10. Expended school money more judiciously.
11. Awakened as keen, or keener, interest in school elections, though non-partisan, as in general elections.
12. Eliminated a multitude of district trustees of but ordinary qualifications.
13. Created in their place a board of education consisting of five very competent members.
14. Abandoned poor, isolated buildings.
15. Erected new, modern, central school buildings, with improved lighting, heating, and ventilating systems.
16. Furnished these buildings with large halls, tinted walls, and ample blackboards; and equipped them with pianos, single desks, working-tables, and other desirable furniture, as well as adequate apparatus, material, and supplies.
17. Kept these buildings in first-class condition.

18. Expanded school grounds to a size which encourages organized outdoor play and the planting of school-gardens.
19. Graded these grounds, put down cement walks, and installed sanitary drinking-fountains.
20. Sought the assistance of the ablest specialists in rural education that our nation affords.
21. Introduced a high quality of school supervision.
22. Employed expert supervisors in primary methods, music, art, physical education, manual training, agriculture, and domestic crafts.
23. Retained special help of the juvenile court in working with delinquent pupils, and engaged the services of trained nurses to examine each pupil at least once each week.
24. Raised the standard of efficiency of the whole teaching force.
25. Held a liberal number of male teachers in the grammar grades, most of whom are making teaching their life-work.
26. Put fewer pupils with each teacher, thereby giving the pupils more personal attention.
27. Resulted in enrolling a larger percentage of the school population.
28. Increased the percentage of daily attendance of this increased enrolment.
29. Increased the percentage of promotions of this increased attendance of this increased enrolment.
30. Added at least an average of 10 days' attendance per pupil per year.
31. Reduced the percentage of failures and retentions more than one-third.
32. Overcome, to a considerable extent, the tendency to quit school before graduating.
33. Made a standard rural high school possible.
34. Inspired a high percentage of eighth-grade graduates to attend high school.

35. Reduced truancy to a minimum.
36. Classified and graded the schools better.
37. Came closer to the real interests of the children.
38. Obtained the good-will and co-operation of patrons.
39. Economized the time of pupils, teachers, and patrons.
40. Overcome local petty prejudice; made the remote country child associate with children of other localities; gave him a broader view, and extended his circle of friends and acquaintances.
41. Created social centres, with their libraries, literary societies, business and industrial organizations, athletic associations, and amusements.
42. Fostered a taste for the best that life can give, and enriched the whole life of the people.
43. Placed strong class leaders in every school.
44. Aroused enthusiasm for healthful rivalry and fair competition in all school work.
45. Made pupils progressive, contented, comfortable, and happy.
46. Taught punctuality and dependability by example.
47. Safeguarded the health of the children.
48. Emphasized a high moral tone.
49. Formed a better basis for the study of the school as a factor of economics and sociology.
50. Made better school legislation necessary.

PROBLEMS AND BIBLIOGRAPHY

We leave the problems and bibliography, if any, here to the instructors, reading-circle directors, or others to devise if they think them desirable.

CHAPTER XIII

THE CURRICULUM OF THE CONSOLIDATED SCHOOL

PRELIMINARY PROBLEMS

1. How should a consolidated school be distinguished by its programme of studies from city schools, elementary and high?
2. What important rural needs for knowledge, habits, and aspirations not obtainable outside of schools are unmet by the present consolidated-school curricula?
3. What advantages has a school for sequential curriculum-making in which both elementary and high schools are in the same building? Need there be a sharp mark of cleavage between elementary and secondary education? Why?
4. In what ways is the consolidated school like the Gary schools in organization and possibilities? (See bulletin on the Gary schools published by the U. S. Bureau of Education through the Government Printing Office, and the survey of the Gary schools, in several volumes, published by the General Education Board, New York City.)
5. If possible, examine the programmes of study of several consolidated schools and test them by the principles expressed by Doctor Bobbitt in his book on "The Curriculum" (Houghton Mifflin Co.).

I. GENERAL PRINCIPLES OF CURRICULUM CONSTRUCTION

The activities in which children engage by which are produced the educational changes, physical and mental, which society needs for the accomplishment of the social purpose constitute the curriculum. Society desires "life, liberty, and the pursuit of happiness" for each of its members individually, and for itself as a co-operative organism. It must create individuals possessed of social knowledge, habits, and aspirations developed in the direction of vital, voca-

tional, avocational, civic, and moral efficiency. Thus will the highest good of the individual and of the entire group be progressively promoted. To acquire these efficiencies for promoting general welfare and happiness, the young are stimulated by various means to gain social insight, ability, and responsiveness. They gain these through co-ordinated and purposeful activities, mental and physical, of the senses, the emotions, the remembering and thinking abilities, and of the various parts of the body.

Growth in these efficiencies through these activities must be progressive and sequential. Such sequence and progress are provided for many important social efficiencies by the ordinary activities of the home. The child learns how to act by acting, how to live by living. Thus he learns to walk and to talk, two great accomplishments, to participate in many home activities, and to "be good to live with." His instincts of play, imitation, curiosity, communication, and many others lead him to do many things that provide him with definite and necessary forms of social efficiency. In the colonial rural home, or "household," practically all the abilities needed for promoting individual and social happiness were acquired at an early age. There was little need for specialized institutions to add to this training. Half of the American homes to-day, however, are city homes, and lack most of the opportunity for broad home education through participation. The farm home has lost much of its educative value, both because of the growing specialization and reduction in the breadth of training, and because of the tremendous increase of scientific knowledge and complexity of human life, for much of which the home alone cannot well prepare. These facts might be proved beyond the patience of any reader.

The school is a *specialized* institution, usually of the government, which should do for children educationally what other institutions are not doing to help them grow best in social efficiency—power to promote the general wel-

fare, or universal happiness of the finest kinds. It is a *supplemental* institution. Children who are being more adequately and economically educated at home for social efficiency than they could be at school need not go to school. If the church does a large share of educational training, less is required of the school. The superior school investigates social needs and desires; it studies the nature of the children; it learns what is being done and not being done for them educationally out of the school; it determines the limitations under which it operates; it then attacks the problem of selecting the most fundamental types of efficiency which it should and can undertake; and finally arranges these most essential activities, "the studies," progressively and psychologically for the learning and teaching processes. These most needed and most feasible activities undertaken by the school constitute the curriculum, or the "course of study," as it is frequently termed, and, more scientifically, the programme of studies which may contain several curriculums, or courses.

In recent years we have developed printed courses, or curriculums, of study, or activity, for many types of efficiency. Frequently, the course for each group of abilities, such as a statement of desirable knowledge, skill, and appreciation in music or reading, is printed in a separate volume, or even in three volumes—one for the lower grades, another for the upper grades, and another for the high school. In some cases each of these volumes is quite large and indicates what activities to encourage, in what order, in what manner, or methods, and how to test results of teaching in the form of socially desirable efficiencies. Recently published volumes are also setting up reasonable standards of attainment for children of different grades and kinds. A certain degree of speed and comprehension is, for example, sought in reading for each grade for each natural grouping of time, such as first term, second term, etc., for each year.

All of the determinants of the public school vary greatly

from place to place. The country child, the country life, the country needs, the other educational institutions of the country, such as the church and motion-picture show, differ widely in different sections of the nation. The minimal essentials of educational activities of the public school as a universal, supplemental, compulsory, and free institution, dedicated to the welfare of the whole people, can hardly be the same for a community of foreign coal-miners living in miserable shacks as for a community of settled American landowners in a farming community when we consider that these essentials must relate to vital, vocational, avocational, civic, and moral efficiency. A certain core of essentials will be common, of course, but this will probably not be large. Even the educational needs of cotton-raisers, wheat-growers, fruit-raisers, and gardeners differ greatly, although they fall into common groups and a certain core of minimal essentials within each group is to be discovered.

In another place the writer has attempted to state the leading principles underlying the course of study, or curriculum of activities, for public schools ("Teaching Elementary-School Subjects," Chapter I). The principles are many, and are as broad as social philosophy and as practical as current school procedure, yet very unsatisfactory at present since we know so little about either the nature of the child and his growth toward social efficiency, of society with its various needs and modes of development, and of the best methods and activities for bringing about mutual adjustment between the two determinants of the process. Most of the people of the world to-day believe in that type of social life which we term democratic. We have waged a war to "make the world safe for democracy"; we are constantly improving the methods of democracy itself, and thus making democracy safe for the world; the public school is the principal institution for making the people safe for democracy and democracy safe for the people by bringing up the young in the democratic mode of life. This should

be its chief and broadest aim. We must have individuals from our schools in great numbers who can both live successfully the life of freedom and responsibility, of democracy, and to help make that democracy better suited to the nature and needs of human life. A summary of such principles follows, not in full, but those of most significance.

1. The school *curriculum* of activities must be adapted to the nature and needs of society and the children.
2. The *aim* of education and society is individual and social happiness through social efficiency of all members.
3. The *factors* of the aim of social efficiency may be stated as vital, vocational, avocational, civic, and moral efficiency.
4. The *changes* which can be made in children in the direction of these aims are both physical and mental in character, the latter being changes in knowledge, in habits, and in feelings; or, in Dewey's language, in insight, power, and responsiveness, or again, knowledge, habits, ideals, and appreciations, all of these classifications being unsatisfactory but helpful to a degree.
5. The public school is a *supplemental* institution and consequently must do what other institutions are not doing in promoting social efficiency within the limits of its powers. No traditional notion of what a school should be must limit it. Its function is that of adapting the present child as he is known and understood to the present and future society as it is known and understood. In the farm community there are usually few educational functions performed by other institutions than the school and home.
6. Needless to say, the rural consolidated school must help young and old to live efficiently in a *rural* environment, and particularly in the environment of the school. Whether it should prepare the young for city life even though some undoubtedly will later spend much of their lives in cities is a question of social policy. Training in open-mindedness and adaptability, and in such knowledge, habits, and feel-

ings as country people need for the best co-operation with cities may be all that is justified. In some cases, of course, a class may be formed of those surely going to the city, and this work, say a course in commercial work, may be worth more to the State than what it eliminates. However, much of the money now spent on rural education benefits the city rather than the country, since so many leave the farm in early life for the city. Perhaps rural education should be strictly rural, and devoted to adapting most children to country and rural village life. This is certainly its dominant and essential aim, but not to be interpreted too narrowly. Each person must be a citizen of his State, his nation, and of the world.

7. There should be *eliminated* from the course, or not included, all that is

(a) Not plainly and directly related to furthering the fivefold aim of education.

(b) Less valuable for promotion of the aim than anything that can be *substituted*.

(c) Not highly useful to a *majority* of the pupils or to the majority of a group that is legitimately specializing in some field of study.

(d) Being effectively taught to all or a majority of the pupils by *outside* institutions such as the home, the vocation, the church, the recreational activities of the community, the Y. M. and Y. W. C. A.'s, and the government through military drill, agricultural agents, etc.

(e) Not comprehensible nor interesting to pupils, except as it is a minimal essential and so must be taught whether interesting or not, and may be retained until it becomes comprehensible later in life.

(f) Isolated and irrelevant, or cannot be connected up in the mind in such organization as will insure its retention until used and fixed.

(g) Detrimental to initiative evoked in pupils and teachers, to the development of the scientific attitude and habit

of mind, to training in judgment of relative values, and to following worthy purposes.

(h) Of such character as cannot be adequately taught in a school.

To these other principles may be added, but these certainly provide for the elimination of most relatively undesirable subject-matter.

8. *Arrange* the subject-matter selected on the basis of the above principles as:

(a) *Minimally essential* subject-matter, or activities, surely needed by all.

(b) *Alternative* subject-matter where choice of several required groups of subject-matter is left to teachers.

(c) *Optional* subject-matter, which may or may not be taught, as the teacher chooses, as time permits, or individual ability and preference of pupils indicate.

9. The following principles must also be kept in mind:

(a) The *ability of the teachers available* must be considered; the amount of teaching they can do in a given time, their need of detailed or general directions and suggestions as to aims, methods, topics or problems, devices, etc.

(b) The *most economical, pleasant, and natural methods and sequence of learning and growth*, physical and mental, on the part of the children must be paralleled by the organization and sequence of the curriculum.

(c) The arrangement should promote, not hinder, the best methods of teaching, such as the *problem method*, in which a problem or project rather than a topic is the basis of learning; and such as the *group, co-operative, or democratic, method* of study and recitation instead of the individualistic, strongly or exclusively competitive methods so much in vogue.

(d) Where there are grades and terms, "years" and "half-years," as customary, the work should show approximately these *divisions of progress expected* in general, with large freedom for individual and particular-class variation.

(e) The arrangement should foster extended *application* of what is learned to the every-day practical affairs of living.

Home and farm projects should go along with school learning. Civic projects will also be used more than in the past.

10. The curriculum should lead teachers to place emphasis not so much on ground covered, pages studied, things made, songs sung, experiments written up, and problems solved as upon the *changes of an educative character* in the direction of the five aims *made in the children and in social life*.

11. The curriculum should be so expressed, selected, arranged, and printed as to make it *a convenient and easily used tool* in the teaching process, guiding effort, furnishing suggestions and inspiration, correlating the activities of a number of persons who must work co-operatively on the joint problem of child and nation building. Growth in power of complete living, in ability to promote one's own and the world's highest happiness and well-being is the broad test of the child's profit from the use of the course of study. Rapidity and normality of such growth may be secured partly by use of the rapidly improving standardized tests of educative changes along lines of the school studies and activities. The immediate future is bright with promise for an education that the common man can see at a glance is vital and essential, and that can be objectively tested to prove the character and degrees of progress made.

To apply these principles in the selection, organization, and application of a rural curriculum is very difficult because such a course must be worked out over a number of years experimentally, and because the principles are so numerous and comparatively vague. The federal Bureau of Education has been struggling with the problem for some time. We imperatively need to-day fifty avowedly experimental consolidated schools in various parts of the country for the discovery of what rural education should be. If our classification of the problems of life, or factors of social efficiency, is correct, namely, that of vital, vocational, avoca-

tional, civic, and moral efficiency, we should expect some activities in the school corresponding to each division and contributing to each type, if outside agencies are not supplying the training for one or more entire aims.

We offer below a few suggestions for each group of these social aims of education in country communities:

A. **Vital Efficiency.**¹—1. *Medical supervision* of the children by doctors, nurses, and teachers, with such instruction and training of the children as shall be found necessary to help them do and understand what they should do to co-operate best to improve their health is necessary and essential. This instruction and training must go into the home and help the child wherever he is to practise such curative measures as may be necessary, and to prevent disease and defects. Vital efficiency is the first aim of education, the corner-stone of the structure.

2. *School sanitation and home sanitation* afford a field of practice in which the children can learn "the reason why" and "do the deed through which to understand the doctrine." All can be led to co-operate to make the school, home, and community environment sanitary. Eliminating conditions making for the spread of hookworm, typhoid, bad colds, tuberculosis, malaria, and other ailments in a practical manner through actual participation would be a part of the school's purpose and curriculum. The congressional hearings on rural sanitation and the various reports on the subject by the federal Public Health Service should be used and applied to the locality.

3. *Physical education* must in some form be a part of the activities of every school through play, physical work, Boy-Scout and Girl-Scout activities, gymnasium training of a more formal character, etc. Excellent physical-education curricula are being introduced in the schools of many States by the departments of education (as in New

¹The writer's volumes on "Educational Hygiene" (Scribners) and "Rural School Hygiene" (in preparation) deal with this fivefold problem.

Jersey) for use by all schools. Special adaptations of these for the consolidated school and country conditions are being made by progressive educators in many States. Rural recreation and physical development can be combined, and will do much to raise the present low standard of physical development of country people disclosed by surveys and army examinations.

4. *Hygiene instruction* through definite and practical teaching of knowledge, habits, ideals, and appreciations applied to life situations and problems of health, facing pupils and country people in general, must also be emphasized, since "health is the first wealth," and our people perish for want of health knowledge and training. Personal, public, vocational (agricultural), and domestic hygiene must be taught and practised. Selections of subject-matter must be made from the stand-point of rural problems and needs. A knowledge of reading is a necessary basis for such teaching in the upper grades as it is for other forms of efficiency to-day.

5. *Hygienic methods* of teaching, managing, and guiding pupils must be taught teachers, and these must teach pupils and train them in mental hygiene and the psychology of healthy-minded living. The hygiene of joy, the philosophy of "being good to live with," the spirit of "sweetness and light," "power through repose," making others in the school happy, and thereby healthy, and the entire influence of mind over body must in some way, without sentimentality, be made a living characteristic of the school. Formal, military, slave-driving, prescriptive, inquisitorial, and condemnatory methods must be changed for those that are democratic, optimistic, co-operative, generous, gracious, and encouraging.

B. *Vocational Efficiency*.—1. *Domestic efficiency* is the efficiency of the members of the home, and especially of "the woman of the house." Supplementary to and correlated with the home, this work for the girls must take in the entire range of activities of the home, not alone cooking and

sewing, and help where help is needed. Necessarily such work will vary much in its optional and fringe content from community to community. In Porto Rico, for example, much or most of the content found desirable in American courses is found undesirable and unrelated to human needs. How to cook and can apples is of little significance to those who have no apples. How to purchase and care for carpets and rugs is of little or no value where such things are not used and are undesirable or impossible of use. Parts of the United States vary almost as much from each other as Porto Rico does from the continent.

2. *Agricultural efficiency* depends upon a common basis of agricultural knowledge and practice, closely related to conditions for both sexes and for various groups, and upon specialization for groups requiring different kinds of school help because they have different kinds of farm problems. One group of pupils may well spend considerable time on the raising of potatoes, while another group in the same school may need little instruction in detail on potato-raising, but much, for example, on fruit-raising or corn culture. Such specialization may be made possible especially for those of the upper grades and high school. Dairying, animal husbandry, gardening, bee-keeping, fruit culture, raising cereals, rotation of crops, recovering old soils, irrigation, dry-land farming, and hundreds of other topics suggest problems of intense practical value in many parts of the country. How much time can be devoted to such activities, including home projects and other applications, must be solved with all social needs before one. The social survey of the rural community is coming to be the best single instrument for discovering these needs for vocational and all other aims. The elementary essentials of arithmetic, closely applied, will be needed here, also simple reading, writing, and the spelling of words needed in letter-writing.

3. *Teaching efficiency* may be an aim for a special division of the rural high school in many consolidated communities.

In a number of States the rural schools have been so poorly provided with teachers by the normal schools that teacher-training departments have been instituted in hundreds of high schools in the last few years. Where there are many single-room schools still in use, as will be true for much of the present century, and while normal schools are so few and inadequately supported, these divisions may be of as much value to the community and the nation as anything they displace from the curriculum or school. They cannot be provided, of course, where there are only sufficient teachers to handle the non-specialized branches, the "core curriculum." Minnesota and other States have solved this by designating one high school in each county as a teachers'-training school, to have such a department, and provide generous State aid therefor.

4. *Professional preparation* may in some cases be provided also for those who are going to higher schools, and thus require subjects required for entrance. Only when a sufficiently large group make a fair-sized class should such work be provided, unless the school is much larger than usual, with a number of elective courses. In certain cases, too, commercial courses can be provided, but are not fundamental to the big aim of the rural school, which must be dominantly and concentratedly directed toward rural life and country needs. Force the higher schools, especially the State colleges and universities, to admit graduates of four-year high schools when their work has been good, regardless largely of subjects taken, and this problem is solved. This great problem of the hampering of all high-school development is candidly dealt with in the following chapter.

C. **Avocational Efficiency.**—*Avocational efficiency* is a term used to apply to that efficiency which makes for the right use of leisure, ability to enjoy life and to engage in worthy recreations and wholesome enjoyments. In a democracy, as Inglis has pointed out, a person is first of all

a citizen with the problems of good citizenship in a democracy; secondly, he is a worker and producer of wealth for himself and others, and thirdly, he is an individual with certain personal interests and activities, a consumer of goods, and an enjoyer of pleasures.¹ One has relations to himself, to his work, and to his country, so to speak. Training for avocation, for the eight hours or so of leisure apart from work and sleep, we have discussed in two later chapters. Here we may call attention to it as a factor largely overlooked in American rural education, although it was the chief aim of the glorious Athenian education of old. A teacher of a rural school was once asked by the writer why she did not use an organ stored in a back corner of the school, and why she did not have singing at opening exercises. She replied that the parents of that district "did not believe in such things"—that they thought that such "things" were a waste of time, and that, although she could play the organ and sing, she didn't dare to take the time of the pupils for such activities, because the patrons wanted her to put the time in on arithmetic and such studies. Yet country people frequently slave themselves to an early death, or to lives of only partial happiness and real efficiency, because of a lack of a training and appreciation for avocations and suitable enjoyments.

Country children need to know how to play and enjoy many games, to learn the delights of reading and how to continue these pleasures after school-days are over, to get esthetic satisfaction from the many things of beauty in the world, to learn to enjoy the natural and social sciences and intellectual activity for self-development and pleasures in the every-day world, to gain the delights of imagination and its aeroplane flights over the noisy world—in short, to gain happiness very immediately and directly in accord with the natural instincts of life and social necessities. Such

¹ In "Principles of Secondary Education." See also Bobbitt's volume on "The Curriculum" and Parker's "Methods of Teaching in High Schools."

recreational and avocational activities should make the labor side of life more pleasurable and efficient. Joy in work is impossible when the latter is degraded into drudgery by overspecializing in this one phase of life. The eight-hour day, improved farm machinery, the growing number of holidays and more recreational use of Sundays, the automobile, and many other similar factors are forcing schools to give more attention to education for avocation. How much of literature, play, athletics, constructive work, dramatization, music, dancing, motion-pictures, festivals, fairs, entertainments, assembly exercises, "socials," receptions, parties, travelogues, speeches, debates, oratoricals, nature-study clubs, camera clubs, literary societies, spelling and ciphering matches, etc., are needed by the community and how much can and should be encouraged at the school is a matter of careful study and good judgment. The tendency is for much more time to be spent in these directions which are so valuable for personal and social culture and happiness. Happiness is the goal of life, not a stolen sweet.

D. Civic Efficiency.—*Civic efficiency* in a democracy is second to no other efficiency, and is probably more neglected in American education than any other, with the probable exception of vital efficiency. General, unapplied education will not produce citizenship and save the world through democracy any more than general unapplied education will make physicians and lawyers. *Training* for democracy is like training for any profession or trade, and definite knowledge, skill, and attitudes are necessary that are closely related to co-operative effort for community and national progress. Pupils will not *know* how to work together, will not have *skill* to work together, will not have the *ideal* and *initiative* for working together without special training beyond what is given by customary non-school agencies.

Community civics is now coming to be an important subject and activity in all grades, for study, for practice, for every-day living. Co-operative methods of study, of

play, of constructive work, of community improvement, beginning with the school environment, are to-day in the best schools working the spirit of democracy into the very warp and woof of the children's lives. The work of the school as a social centre is keeping the habits and spirit alive in those who have left the school and engendering it in the lives of others who have not attended in the days since schools have begun to carry on a democratic life. There is hardly anything good that can be conceived as practically desirable for a community that cannot be started and pushed through to realization by a school working in the spirit of democracy. Good roads, consolidation, co-operative stores, creameries, elevators, and laundries, better churches, improved recreational facilities, better government officials, improved methods of farming, greater use of the State and national governments for helping farmers, and so on—all may spring from proper civic education in schools. North Dakota is setting an example.

Citizenship courses, literature developing high and attainable civic ideals, emphasis on the social and civic aspects of several subjects, such as history and geography, as well as actual learning to do by doing, becoming a citizen by being a citizen up to one's powers, must in some way be incorporated in the curriculum even at the expense of some of the old-time formal grammar, impractical arithmetic, the non-English languages and non-arithmetical mathematics, rhetoric, and the spelling of long lists of words never used in letter-writing. Ability to speak and to write simple English correctly will be desirable here. Training in public speaking will be a regular part of the school life. The U. S. Bureau of Education has been doing excellent work in this field, and has printed valuable pamphlets on the subject. Some opposition to these community lessons issued by the federal Bureau of Education was made by a manufacturers' association, but civic instruction and the people's rights cannot be successfully denied. Civic efficiency will grow



Members of the Boys' Corn Club with agent explaining the root system,
Alabama



A school agricultural exhibit in the Philippines

up as naturally in the civically directed consolidated school as will vocational efficiency, or any other, when proper time and attention are devoted to it effectively.

E. Moral Efficiency.—*Moral efficiency* probably requires special attention in most schools, although the ideal is, perhaps, to gain morality by living morally and gaining the precepts incidentally in connection with ever-recurring moral problems. However, accurate ethical knowledge, habits, ideals, and appreciations are undoubtedly promoted very much by something more than incidental attention. As citizenship is acquired through careful, sequential education, so morality can and must be strengthened by moral education. Here the co-operative training and study for citizenship also plays into the hands of morality. Literature may be selected for reading, as shown in a later chapter, that tends to develop each of the great racial ideals necessary for the common life, the life of the present-day rural community, and for meeting the great temptations as well as opportunities in modern complex civilization. In some schools sequential courses in moral training, or moral instruction, have been successfully introduced.¹ While there is danger of making little prigs and "goody-goodies" with poor teachers, yet with able supervision, carefully prepared curriculums, and a great deal of attention to texts, devices, methods, selections, and suggestions, much can be accomplished not now being attempted by either home, church, or school to raise the level of moral efficiency in the greater rural neighborhood. At present, considerable attention is being paid to moral instruction. The United States Morality Codes encouraged by the Bureau of Education will be of help in this movement, as are also the various texts devised for morning exercises and classroom instruction.

Without going into further detail, we can illustrate the method of keeping educational aims and the changes which

¹ See Sharp, "Moral Instruction," Bobbs-Merrill Co.

can be made in children, physically and mentally, before one by the accompanying chart. At the left are the five great phases of social efficiency as aims of education, while at the right are some of the appropriate general changes to be produced in children in the direction of these efficiencies. The chart is largely self-evident after the preceding explanation. The essentials of the three R's, or tool subjects, are necessary, of course. Other classifications of both the aims and the changes are possible. At the left might be individual, civic, and vocational efficiency, and at the right the changes, physical and mental, the latter stated as changes in knowledge, skills, and feelings.

EDUCATIONAL AIMS AND EDUCATIONAL CHANGES IN PUPILS

Social Efficiency	Physical Changes	Mental Changes			
		Knowledge	Habits	Ideals	Appreciations
I Vital efficiency	Removal of adenoids, building up physique	Hygiene. Health instruction	Training in living hygienically. The habits of health	The ideals of health and physical efficiency	The interests and attitudes of health
II Vocational efficiency	Physical preparation for vocation	Economics and occupations	The habits and skills of the vocation	Ideals related to industry	The interests and attitudes of vocation
III Avocational efficiency	Physical changes due to right avocations	Knowledge of avocations	The habits and skills of avocations and use of leisure	Ideals of recreations and avocations	The interests and attitudes of avocations
IV Civic efficiency	Any physical changes related to citizenship	Civics. Rural citizenship	The habits of civic participation	Ideals of citizenship	The interests and attitudes of citizenship
V Moral efficiency	Any physical changes related to moral living	Ethics. Social service	The habits of the moral life	Ideals of morality, religion, and social service	The interests and attitudes of the moral life

CHAPTER XIV

THE CURRICULUM OF THE CONSOLIDATED SCHOOL (CONTINUED)

II. PROGRAMMES OF STUDY

The curriculum for the elementary school would contain subject-matter selected and arranged on the above principles, and would be selected from hygiene, physical training, play activities, elementary rural economics, agriculture, domestic science, home projects, gardening (except in regions where gardening is impossible or is being provided by outside agencies), farm arithmetic, simple English composition with emphasis on letter-writing, spelling of one or two thousand words most used in rural correspondence by children and adults, such few elements of grammar applied as really help children in improving oral and written composition, probably not to be taught at all as a separate subject but in close connection with composition and ordinary speech, the most usable and attractive phases of geography and history, elementary science for vital, vocational, and avocational efficiency, especially music, including particularly ability and delight in singing fifty or more of the great "community songs," such elements of drawing and fine art as can successfully compete for a place in the school and home lives of country boys and girls in competition with other subjects, civics, biography, reading, writing, thrift, good roads, rural sanitation, elementary ethics, farm carpentry, elementary blacksmithing and auto repair, methods of co-operation for community enterprises, life insurance, taxation, and other subjects, problems, and topics.

We can point to hardly any curriculum in the United States at the present time satisfactorily adapted to country boys and girls in consolidated rural schools. The courses

published for the rural schools (largely single-room schools) of Baltimore County, Maryland, are of the new order, but thoroughgoing courses worked out on the basis of a sound philosophy of education and the essential needs and problems of a country community educating its children in consolidated schools are yet to be developed. Here is a great opportunity for an organization of consolidated-school principals of various States. A curriculum for the rural elementary and high school properly developed would make a large volume, and must be created by years of study, adaptation, and experimentation, leaving much opportunity, of course, for local initiative, adjustment, and modification.

The elementary-school curriculum would necessarily have to be organized with reference to the high-school curriculum, especially since the two schools are usually in one building in the consolidated school. In this, the plan resembles the Gary system, in which pupils go to the same building for twelve years if they graduate from high school, and in which teachers teach more by departments of work, caring for both elementary and high-school pupils, than by strict horizontal divisions, including certain years. In fact, many of the important and best features of the Gary system fit in well with the consolidated rural school. We should, then, expect most of the work in the consolidated school to be departmental, thus making provision for individual differences and for specialization by teachers. The ordinary country-school teacher is so overburdened with a great number of subjects to teach that she can become highly efficient in none. Yet the rural teacher, because of insufficient normal-school and other preparation, needs such opportunity most.

The entire curriculum could be organized into four cycles of three grades, or years, each: primary, upper, junior high, and senior high. Probably all but the first three grades should be placed on the departmental plan, by which, as suggested, each teacher teaches one or more subjects to

several classes instead of all subjects to one class. Further investigation of individual differences may even lead to the desirability of providing departmental work for all grades. The first six grades would be the elementary school and the last (five or) six the high school. Perhaps a year in the child's school life can be saved by such improved organization.

The accompanying programme of studies is for the upper five or six grades, and is merely suggestive of a very general plan. In the consolidated school several of the alternative courses, such as the industrial and college-entrance courses, will ordinarily be omitted, and greater differentiation may be made in the agricultural courses. In small schools with few teachers little more than the common, "core" curriculum should be attempted.¹ The vocational work for boys in the common course would be agricultural training in an agricultural region. In a cattle country it would be more of the nature of animal husbandry. No languages except English, and no mathematics except arithmetic (the non-English languages and the non-arithmetical mathematics), would be studied by pupils unless a group large enough for a class, say seven to ten pupils, required them, either for daily use or for entrance to a higher school, and then only when the school had the teaching force to do so, and these subjects were certainly preferable to any that could be put into their places. The economics taught would, of course, be rural economics. The commercial and the normal courses should be given in but few schools, the latter preferably in but one high school in a county. Excellent developments of this teachers'-training course have been made, as suggested, in several States, such as Minnesota.

The chief limitations of the present consolidated rural-school curriculums at present are that they too often are merely college-entrance courses, and are thus suited to but very few pupils, or none, and that they have little conscious adaptation to the principal problems of rural life. Universi-

¹ See page 314.

A SIX-YEAR PROGRAMME OF STUDIES
(UPPER SIX GRADES OF TWELVE-YEAR SCHOOL)

Seven 40-minute periods daily.....	I	II	III	IV	V	VI
Assembly—20 minutes daily, or study.....	5	5	5	5	5	5
Study period for all pupils daily.....	5	5	5	5	5	5
Hygiene and physical education.....	3	3	3	3	3	3
Agricultural and home education.....	5	5	5	5	5	5
Arithmetic and farm accounts.....	5	5				
Community civics and current events.....	3	3	5			
Advanced civics and rural economics.....						5
United States history.....	3	3				
General history.....					5	5
English: Literature, composition, public speaking.....	5	5	5	5	5	5
Music, drawing, esthetic appreciation.....	2	2	2	2	2	2
Rural sociology and applied ethics.....				5		
General science.....			5			
Physics and chemistry.....				5	5	
Geography.....	4	4				
Total required periods, excluding study.....	30	30	25	25	25	25
Number of elective periods.....	0	0	5	5	5	5

ties and colleges, especially agricultural colleges, must come soon to an understanding that their entrance requirements of non-English languages and non-arithmetical mathematics defeat the very purposes for which they stand, the enlightenment, training, and inspiration of rural life, and that they

must help rather than hinder the close adaptation of high schools to their tasks. Engineering schools within colleges may, of course, require mathematics and classical schools the languages; but it would be far better for most States to have these taught in colleges than in the typically small high schools where the teaching staffs are but large enough to teach the vital essentials for rural social efficiency. Professors of education in colleges and principals of high schools must band together to lead and to force, if necessary, the colleges to make the four-year high-school curriculum, whatever it may best be, sufficient (with good scholarship and a principal's recommendation) to satisfy the entrance requirements. The lamentable inefficiency of the present rural elementary and high school, consolidated or not, is, in these times, so dangerous to democracy and intolerable as to require forceful measures. The highly specialized professional or academic subjects must not be imposed on our prospective farmers.

We present herewith two suggestive programmes of study. The short, single-course one above attempts to provide the upper six grades of a twelve-year consolidated school with a rural education along the line of the five aims of education. It is arranged for a small school with few teachers, the minimum number possible. We do not suggest the elective subjects. Few can be given. If we assume that teachers should not be required to teach more than twenty-five class periods a week, with possibly five more periods for library or study-hall supervision, we have a need here at once for about six or seven teachers, including the principal, who would be responsible for class-teaching not more than two-thirds of the time, say not more than twenty hours a week, preferably fifteen. Of course, two of the teachers will take the place of seventh and eighth grade teachers. When fewer teachers are provided it will be desirable to omit one or more of the last years of the course, and not attempt to teach them. By carrying probably too heavy

a load one teacher for each year can handle the work, but this is not recommended.

The class periods are shorter than desirable for a consolidated or any other secondary school, perhaps. There should be little home study required for pupils, a number of whom are long on the road each day, some upward of an hour each way in many places. The longer class period up to an hour gives opportunity for supervised study, say the first half of the period for recitation and the second half for study, or other methods as suggested in Hallquest's and other books on the subject. Fifty or fifty-five minute periods are desirable. A good plan has been found to have fifty-minute periods and have pupils change on the hour with the intervening ten minutes for social intercourse, relaxation, conferences with teachers, an out-of-door walk or run, etc. However, when elementary and secondary school are in the same building, as usual in this type of school, these free periods may disturb the elementary school and the elementary-school recesses may disturb the secondary school. If so, elementary and secondary school pupils may have recesses at the same time, and little time may be permitted for passing from room to room between periods. It is difficult to arrange a daily programme that will coincide well with such arrangement, but it is being done. The one-story building is a help here. Elementary pupils may play on the opposite side of the building from the high-school wing, and each classroom opens to both the corridor and playground. There is quite a movement on foot to lengthen the school-day where considerable motor activities such as manual training, physical education, laboratory work, etc., are furnished. Some consolidated schools start work at 8.30 and close at 4. Little children are let out to play or go home, if they live near, at 3.30.

Assembly is provided for each day. The time should be thirty minutes, but we have suggested twenty here. For programme convenience it may be well in some cases to

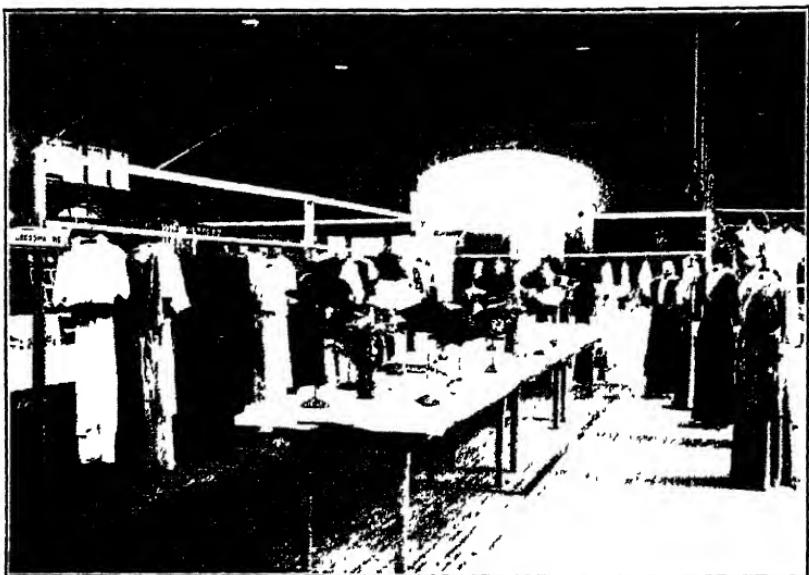
have it the first thing in the afternoon, when it is harder to do class work. A study period for all pupils daily is provided. If necessary, some of the assembly periods may each week be devoted to study, but such a procedure would indicate that the principal and teachers do not know how, or lack skill, to make the assembly one of the most educative meetings of the pupils in the day. Here all get together, and the possibilities for social training, singing, orchestra music, public speaking, debates, speaking by outsiders, ethical readings, current events, community problems, little plays, and general social intercourse and friendliness in a joyous, co-operative manner are educationally very great. With an able singing leader and good community songs as are published in such song-books as are published by Birchards of Boston ("Fifty-five Community Songs"), a school of pupils may be lifted up and unified spiritually by music alone. What they have done for foreign groups and for our soldiers is well known. A large assembly-room is desirable, and the least that can be done is to provide a combination assembly, study-hall, and gymnasium. Throwing two classrooms together by a movable partition will hardly solve the problem, although this may be done for the elementary school for separate assemblies at times.

Hygiene is an important subject that lies at the basis of a needed health revolution in the country. It may well be studied each week, and closely related to life for enough years to give a thorough grounding in its principles and ideals, and especially in the habits necessary to health. One hour a week for this and two for play, physical training, and athletics are satisfactory if no more time can be obtained. Of course a good gymnasium is desirable, but the out-of-doors furnishes a good place, too, much of the year. If possible, obtain the gymnasium and develop our young people better than previous generations. In Utah, the swimming-pool has been proved indispensable. When nearly half of our recruits must be rejected for preventable physical

defects and ailments in country and city, the schools should wake up to their national responsibilities. Personal hygiene, rural hygiene, rural sanitation, public hygiene, and vocational hygiene as relating to country conditions should be studied and practised. Coleman's "The People's Health," the O'Shea-Kellogg series, the Gulick series, the Ritchie series, Tolman's "Hygiene for the Worker," and Richards' "Hygiene for Girls" are of the new order. Ditman's "Home Hygiene and Prevention of Disease" is probably the best book for the home, and should be at hand always for reference. Hygiene is rapidly being socialized. The physical-training manuals, in three volumes, of the State of New Jersey are probably the best published for all grades as yet. The latest books on rural sanitation should be on reference. Texts in hygiene are yet to be prepared for rural schools.¹

Agricultural and home education has as much time in this common curriculum as has English, and it certainly deserves it. Vocational education for home and field is a minimal essential to take no second place. For boys, farm manual training and carpentry and concrete work, home projects, fruit-raising, care of farm animals, and the various phases of agricultural instruction that can be separated and taught to boys alone may be given. For girls, sewing, cooking, laundry-work, home decoration, the care of children, home literature, home projects, poultry-raising and care of the dairy, and so on, may be provided. For boys and girls in common classes the subjects of botany and elementary agriculture, household accounting, and others, may be provided. If the botany and agriculture take two years of about five hours a week, and the separate subjects three or four years, the pupils should get rather definite training for the vocations of farming. Perhaps rural economics and rural sociology may be put in here for one year instead of separately, according to our plan. Of course five periods a week is only a suggestion. Double periods or half days may be

¹ "Health Education in Rural Schools" is recommended for teachers.



A domestic arts exhibit



A day of recreation in the mountains

arranged. Short courses for those who have left school are being provided in many consolidated schools.

Arithmetic, farm accounts, and bookkeeping, and all the applications of arithmetic needed for good farming and home-keeping, should be given. Much of the ordinary arithmetic can be cut out and rural arithmetics used, of which there are several. The work of the national committees in selecting the essentials of arithmetic should be studied in making the course. Much of the work will be devised by the teacher in connection with practical activities.

Good penmanship, or handwriting, up to a reasonable standard of efficiency in speed and quality of writing is desirable. By use of the Ayres, Thorndike, or other scales of quality, and the most desirable standards of speed, those pupils may be selected who need regular drill. Fifteen minutes a day may be taken from some other subject for those pupils who need drill. Other pupils of a class may advance beyond the minimum standards set for ordinary correspondence, or study something else in the time. Spelling, writing, and English should be considered, corrected, and marked in all courses and subjects. A few minutes a day may be taken for spelling drills from English or other studies. All pupils before entering the upper six grades should be a hundred per cent correct on most of the thousand words given in Ayres' spelling scale, or the larger number in the Pryor list.

Rural-community civics is of prime importance in democracy's schools and has in the past been criminally neglected. Field and Nearing have a delightful little book on the subject for rural schools, which, with current events and library and magazine readings, will furnish work for the first and second (seventh and eighth) grades. It really could be handled in the sixth grade of the elementary school, and thus catch many pupils who drop out early. Dunn's "The Community and the Citizen," Towne's "Social Problems," the community-civics lessons in pamphlet form published by

the Bureau of Education, and other volumes rapidly appearing may be desirable. The third year should be a solid grounding in the subject, but leaving state and national civics and government largely to a later time. Beard's "American Citizenship" and such books fit the latter course, which here is put into the last year with rural economics. Carver's "Rural Economics" and separate volume of "Readings in Rural Economics" is somewhat heavy, perhaps, for a class not prepared by social studies, as this will be. Burch and Nearing have a good elementary book on "Elementary Economics," but not especially adapted to rural schools. If the teacher and principal are graduates of an agricultural school they will know of good volumes on the subject for their own personal use.

United States history has now good texts like Muzzey's and James and Sanford's, and there are good books on the teaching of history (as well as most other subjects), such as Johnson's. Three times a week for two years are sufficient to cover the subject fairly well. Some put the course in again in the last year, as I have done in the second and larger general programme presented later.

General history with its broad social studies, when well taught, gives an international breadth to the pupil's experience. In the new internationalism of our country two years could be said to be desirable, five hours a week. Of course this will include another survey of United States history as a part of the general. Good history teachers are very hard to get, and too many let the subject (and the pupil's interest) die on their hands. Yet they have a wonderful opportunity. History should be used as a means of explaining and simplifying modern complex social life. The growth of rural life, inventions, and institutions will be emphasized.

English is discussed later in a separate chapter, as are also the non-English languages. The non-arithmetical mathematics (algebra and geometry) are also discussed briefly. Our programme permits of some elective periods,

and more may be provided for a group going to a college that still demands these subjects. Well-taught and selected English literature and composition, with all it may include, is a minimal-essential subject. The non-English languages and non-arithmetical mathematics are not, I believe, although some feel that they may possibly be worth what they cost, if not what they exclude. Public speaking and the use of magazines, the methods of organizing community literary, reading, and improvement clubs, letter-writing which is *the* minimal essential of written composition, and so on, may be thoroughly treated. Letter-writing may be made to include all forms of composition and can hardly be overemphasized. Some professors in agricultural colleges have recently put excellent stories and essays on country life in volumes for classes in English in country higher schools.

Avocational efficiency demands many types of activities, such as music and recreation. The various fine arts can be treated in close connection with country problems, and perhaps not only art and nature appreciation may be developed but regular classes in drawing and painting, or other types of artistic expression, may be provided. Music should be given to nearly all pupils one or two periods a week throughout the course for technical knowledge and skill and for the appreciation and delights afforded. The old-fashioned singing-schools are being revived as community singing.

Moral efficiency, with the general breakdown of the rural church (at least a common church which all attend), demands special attention. The subject has been given great attention in recent years. Much can be done through the previous courses, and some would omit moral efficiency as a separate aim, but a separate course for a half year, gradually merging into rural sociology, is undoubtedly desirable. Sharp of Wisconsin, Fairchild, and others have recently been elevating this study. Sharp's book is published by the Bobbs-Merrill firm at Indianapolis. Mrs.

Cabot's books on "Everyday Ethics" (Holt) and other similar subjects are valuable texts.

General science has a great message and service to render modern life, and especially the country. A renaissance of science teaching has taken place and the subject is being hooked to the practical problems of life along the great lines of health, vocation, avocation, etc. Elhuff has a valuable text and manual (Heath), but I know of no book especially for rural schools. General *physics* and *chemistry* are each given five hours a week for a year later. They also must be profoundly influenced by farm needs and the great aims of education. The teacher should have good laboratories and a demonstration room with raised seats for the pupils. I hesitate to name a text even as an example, since change is taking place so rapidly. Botany we may put in with the vocational subjects, if six years are too much for the more purely vocational subjects. It should have at least one year, and of course be especially full of help and suggestion for people living by and among a world of plants. The avocational value of the sciences is also very great. One may study the stars, not to know when to plant his corn or kill his hogs, according to old superstitions, but to increase his enjoyment and harmless happiness through life. The mysteries of nature are instinctively matters of great interest. The elements of *zoology* may be connected with the one hour a week devoted to hygiene and its basis of physiology and anatomy. Perhaps a good half-year course or longer, five hours a week, may be found for it elsewhere. It may be that a half year of botany and a half year of zoology may well be provided. The elementary course should be full of nature study and thus prepare for these high-school studies. These sciences may well be classified about life problems.

Geography may minister much to man's understanding of his scene of action and the great natural and social forces at work in the world. Physical, commercial, and political geography from the standpoint of the modern rural worker

and citizen, who has world-wide relations along many lines especially economic, are all desirable, not as technical, highly classified sciences, but as selections of matter of most worth to country people, and organized on the basis of interest, the psychology of learning, and of human need. Dodge and Kirchway have a good book on the teaching of the subject. Twiss has a very good volume on "Teaching the Natural Sciences" (Macmillan). The writer's volume on "Teaching Elementary School Subjects" gives rather complete bibliographies on the elementary-school subjects discussed above. Inglis' volume on "Principles of Secondary Education" (Macmillan) and Johnston's volumes on "High-School Education" and the "Modern High School" (Scribners) treat well of the high school.

The second programme of studies offered herewith is much more ambitious, and requires a larger staff such as could probably be provided in a large village or small city with consolidation. It was developed originally as a generally suggestive programme of studies for all secondary schools, and as here modified it perhaps would fit no local situation. A longer day is here suggested, but the periods may remain the same as in the previous one. An eight-period day is, I believe, a mistake, and one of six periods would probably be highly desirable if each were longer. To avoid so many studies a week for each pupil the future will undoubtedly provide extensive correlations. The social sciences might be organized as one continuous subject, for example, and the natural sciences and the vocational subjects will probably be given in less disjointed form than usually. Of course most good consolidated and rural-village schools, as previously suggested, will give a good deal of extension and demonstration work, and will provide short courses in the winter for those who can attend the entire school year. The large programme gives, also, alternative curriculums differentiated for seven different groups. The

A FIVE OR SIX YEAR HIGH-SCHOOL PROGRAMME OF STUDIES¹

THE SIXTH YEAR HAS INTENTIONALLY BEEN LEFT VACANT

Probably Seven 40 to 50 Minute Periods Daily		I (7)	II (8)	III (1)	IV (2)	V (3)	VI (4)	
ASSEMBLY—30 minutes daily.....		5	5	5	5	5		
Study period for all pupils daily.....		5	5	5	5	5		
REQUIRED OF Most Pupils	English—comp. lit., pub. speaking..... Hygiene—personal, public, vocational..... Physical education and recreation..... Music, fine art (drawing), appreciation..... Vocational, ed'n, incl. household arts..... Arithmetic and farm accounting..... Geography and elementary science..... History, U. S. Penmanship..... Community civics, survey of vocations..... General science..... Applied ethics and el. sociology..... General history, or to 1700..... Another science, or more general science..... United States history or general history..... Gov. civics and el. economics.....	5 1 2 2 4 5 4 4 3 5 5 5 5 4 4 3	5 1 2 2 2 5 2 4 1 5 5 5 5 5	5 1 2 2 2 5 2 4 1 5 5 5 5 5	5 1 2 2 2 5 2 4 1 5 5 5 5 5	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	
“Core Curriculum” or “Common Curriculum”	Total required periods, excl. of study.....	30	30	30	20	15		
	Elective periods	0	0	0	10	15		
1. GENERAL COURSE	Probably largely optional, with educational guidance. Ten hours in fourth and fifteen hours in fifth years.....						10 15	
2. AGRICULTURAL COURSE	Elementary agriculture..... Farm arithmetic and accounts..... Rural economics..... Other agricultural studies.....	5 5 5 10						
3. HOME-ECONOMICS COURSE	Sewing..... Cooking..... Household accounts and laundry..... Home management, bacteriology, literature.....	5 5 5 5						
4. COMMERCIAL COURSE	Business arithmetic and business English..... Bookkeeping..... Stenography..... Typewriting.....	5 5 5 5						
5. NORMAL COURSE	Elementary educational psychology..... History of education..... Class management and school subjects..... Observation and practice..... Elective.....	5 5 5 5 5						
6. INDUSTRIAL COURSE	Business arithmetic and accounts..... Commercial geography..... Shop work and other studies.....	5 5 15						
7. COLLEGE- ENTRANCE COURSE	A foreign language: Spanish, French, etc..... Algebra..... Geometry..... Elective.....	5 5 5 5						

¹ Revised from one published in *School and Society* for May 12, 1917.

industrial group may, in most rural regions, be omitted, although farm blacksmithing and other such work may be provided in the vocational course and be termed shop work. We cannot take space to discuss the second programme, nor can we suggest desirable programmes of recitations for different numbers of teachers for either programme of studies. We only hope that some valuable suggestions may arise from perusal of the different chapters. A college-entrance course is provided, but this does not mean that the former course prevents preparation for the conservative college that still requires languages and mathematics for entrance. The pamphlet on "Cardinal Principles of Secondary Education" by the National Committee on the Reorganization of Secondary Education, published by the Government Printing Office, should be read in this connection. My aim here is to lead to experimentation and original study, not to settle this most important question in any particular.

After securing able teachers the most important problem of rural education is the programme of studies. Yet the help one can secure on making such a programme from responsible educational bodies is almost insignificant. The writer attempts to plough but a few outlining furrows in this "stumpy" ground. A crop of experimentation and vigorous adaptation of the school to the farm is all that may be expected.

PROBLEMS IN APPLICATION

1. What principles of curriculum-making may desirably be added to the list given in this chapter?
2. What practical suggestions on curricula for the upper grades and high school are given by Doctor Inglis in his volume "Principles of Secondary Education," chap. XX?
3. Read chap. VIII of Arp's "Rural Education and the Consolidated School," entitled The Rural Community and Its Needs, and then read his chaps. VI and VII, dealing with curricula, and determine whether these needs would be met by the types of curricula he recommends.

4. What suggestions for rural high-school curriculum-making can you find in Lane's bulletin on "Agricultural Instruction in the High Schools of Six Eastern States"? Government Printing Office.
5. What further suggestions do you obtain from Nolan's volume on "The Teaching of Agriculture," chaps. III and IV? Houghton Mifflin Co.
6. When do people need to know how to spell words? If we prepared pupils to spell the words most frequently used and misspelled in letter-writing, what eliminations could be made from the ordinary spelling courses? See chaps. I and III of Rapeer's "Teaching Elementary School Subjects" (Scribner).
7. If the aims of education are vital, vocational, avocational, civic, and moral efficiency, what types of knowledge, habits, and ideals are of most worth to country boys and girls? Put them in a large chart. A group of teachers may well work on but one square of the chart such as the health or the civic ideals or habits desirable in a *particular community*.
8. What subjects have been emphasized as of little and of great comparative value by the war?
9. What per cent of time have the rural public schools, elementary and high, given to instruction and training along health lines? See report of investigation in *School and Society* magazine for December 18, 1918. See also Bobbitt's "The Curriculum."
10. What per cent of school time from the sixth grade on may legitimately be devoted to direct vocational education (agricultural and domestic), partly on the farm and partly in school? Does this exclude or minimize real cultural and avocational preparation?

BIBLIOGRAPHY

NOTE.—So little of value has been written on the curriculum for the consolidated school, apart from the references in the chapter, that no special list is here given.

CHAPTER XV

RURAL-LIFE NEEDS AND COLLEGE-ENTRANCE DEMANDS

PRELIMINARY PROBLEMS

1. What per cent of the graduates of some well-established consolidated school of which you have knowledge go to college?
2. To what colleges in the same State do they go?
3. What subjects are required for entrance by these colleges?
4. What subjects do these requirements indirectly force high schools to teach?
5. What is the average, or median, number of teachers in the rural high schools of your State?
6. If the college-entrance requirements name subjects that are not of most worth to rural youth, how can the typical high school with very few teachers provide both college-entrance curriculums for the few and rural-life curriculums for all?
7. What steps have been taken by colleges in your State to make it easy for pupils to make thorough preparation for meeting the most pressing problems of life, and at the same time to enter college if they are able to do so on graduation?
8. What effect have the requirements of colleges without your State on your rural high-school programme of studies?
9. Is a rural consolidated school justified in attempting to meet the non-English-language and non-arithmetical-mathematics requirements of conservative Eastern colleges, considering the percentage of high-school graduates who go to them?
10. What has Professor Bobbitt to say on the non-English language question in his volume on "The Curriculum"? Houghton Mifflin Co.

I. THE ESSENTIALS AND THE REQUIREMENTS

A crucial problem in American education to-day is that of adjusting the conflict between giving our pupils a real education and of preparing some of them for college. In the rural consolidated school this problem everywhere is acute

because this type of school must not fail to give boys and girls a thoroughly efficient rural schooling. In the history of education new schools have failed the people by becoming formal and aristocratic, catering to a few instead of the many. The *gymnasium*, the *real school*, the *academy*, and the ordinary high school have each started as a popular reform school, and gradually lost their early high aim. The educator who has studied the psychological, historical, and social aspects of the curriculum sees that a natural, traditional association has to-day grown up in the minds of many between the idea of secondary schooling and a curriculum made up of such subjects as Latin, Greek, algebra, geometry, French, German, etc. Many think of the secondary school as being the institution which teaches these subjects, and that a six, five, or four year secondary school would lose its identity if it taught others instead.

The educator looks upon schooling, however, not as a traditional, static, fixed thing, so far as subjects of study go, but as a vital agency for helping the people to meet in the most effective manner their principal problems of life. He is interested in the dominant unmet needs of our civilization, in the social composition of the student population, and in the types of knowledge, habits, ideals, and appreciations which will best contribute to the solution of grave individual and social problems. Latin, geometry, algebra, German, and other subjects are to him but tools to be used only when they fit the purpose of education better than any others which may possibly be selected or constructed. There is to him no sanctified subject-matter to question the relative value of which is sacrilege. All phases of a curriculum are to be submitted to the test of relative contribution to the dominant purposes of schooling in our present-day complex and rapidly changing industrial democracy.

The social composition of the high school has within a few years vastly changed. From being an aristocratic in-

stitution fitted for the few who went to college, the high school has in the last fifteen years doubled its number of pupils, over 90 per cent of whom will never attend a college. From being an institution which could not well be tested by its serviceability in meeting the pressing needs of life (since the children of well-to-do parents have many means of success aside from their schooling), it has become one in which such fallacies as those of broad "formal discipline" cannot be disguised by fine words and phrases, such as "culture," "discipline," "preparation for college," and the like. We are to-day facing the problem of giving a secondary education to nearly 2,000,000 children from all ranks of society instead of merely to those of the "upper crust."

Life Problems and Educational Problems.—The problems which most of these pupils face when they leave school are the common problems of life rather than the artificial demands of an academic college. These principal life problems, about five in number, form the chief aims of education about which we are practically all agreed. These aims of public education, as we have previously suggested, are the following forms of ability or efficiency:

1. Vital efficiency—health and physical development.
2. Vocational efficiency—agricultural, domestic, and others.
3. Avocational efficiency—right use of leisure, wholesome enjoyment, recreation.
4. Civic efficiency—citizenship.
5. Moral efficiency—morality, true religion, and social service.

These are the chief social aims of all phases of education from the pre-school period upward. Knowledge, habits, ideals, and appreciations (including attitudes, prejudices, tastes, points of view, etc.) must be developed along all of these five lines and also for such fundamental tools as the three R's. Placing at the left of the page these seven commonly accepted aims, and at the top of the page the four

types of psychological changes which can be made in individuals, as shown in the previous chapter, we may form by horizontal and vertical lines a chart, in the squares of which we may place the minimal essential of an education, elementary, secondary, higher. Some of the general subjects and activities (greatly modified, rearranged, and stated) which we shall require in the rural school corresponding to these aims, as above given, are those of

Hygiene and physical education.

Agricultural training.

Rural economics.

Arithmetic.

Home education.

American citizenship.

History.

Introductory social science.

Introductory natural science.

Applied ethics.

English language and literature.

Music.

Drawing.

Public speaking.

Avocational and recreational activities.

Rural sociology.

It can be seen that these subjects are, or can be, closely related to the five dominant classes of needs of our people as individuals and as a nation and thus to the five dominant aims of schooling. The list is noteworthy for two great omissions, covering six to eight subjects, namely, the "non-English languages" and the "non-arithmetical mathematics." These cannot in America be justly required of any large proportion of our pupils. They are highly specialized subjects, meeting the dominant and fundamental needs of exceedingly few persons. They cannot be listed with the minimal essentials of a commonly required education. If we were a European country in close association with peo-



Grading and testing corn in a school laboratory, West Virginia



A class in soil study in Wisconsin



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Farm mechanical drawing in a Maryland school

ples using other languages than our own, if all our students went into engineering, foreign service, or translation, if there were not so many mechanical substitutes for calculation in use, if we could depend upon training regardless of subject-matter (formal discipline), if all students had from ten to fifteen years for secondary and higher education, if the problems of life were not so insistent and pressing for our people, if our students were all exactly alike, and if the added cost for teaching such subjects to all were not prohibitive, we might entertain the suggestion that these five or more subjects might well be kept as the staples, or staple electives, of secondary education, and be required for entrance by all colleges, even State agricultural colleges.

Traditional Subject-Matter vs. Essentials.—As it is to-day, the omitted subjects are usually required for entrance to colleges, and our great popular high schools, with their thousands of students to the college's hundreds, must, willy-nilly, in many cases, and because of the force of aristocratic and traditional standards in others, teach the non-essential instead of the *essential*, since algebra, geometry, Latin, French, German, Greek, Spanish, etc., are not minimal essentials of an education. They are the tools of a very limited group of persons, and most who study them to-day in our rural or city schools have much better use for their time.

Even where a high school has a large teaching force it is difficult to make up a strictly, and effective, *educational* course for a student, and at the same time provide a *college-entrance* course for the few who propose going to college. But the typical high school of this country has but two to four teachers. It cannot give a separate course for those going to college and at the same time take up the courses that are closely related to the fundamental needs of our students and the country at large. Out in the cactus and sage-brush regions of the West, in the little "God-forsaken" Eastern village which so much needs intelligent study and

for engineering, if Latin and other non-English languages are needed for teachers of these languages, or for academic specialization, let these subjects be taught as a part of the regular technical courses in either the college, or, by option, in the high schools with large enough groups specializing in these lines, and with sufficient teachers and money to give fundamental education for all as well as technical or academic preparation for the few. Beyond requiring English and recommending sequence in courses, perhaps little should be demanded along other than absolutely essential lines. On the other hand, every American college should, as soon as possible, refuse to accept students who have not studied hygiene, citizenship, applied ethics, elementary applied economics, English, general science, and perhaps a few other fundamental subjects. It is both safe and patriotic to demand essentials for democracy and rural life. If colleges will study the causes of failure of students, and will report to the high schools on the relative success of their former pupils, giving reasons for failures, if they will insist upon good methods and high standards of work, and if they will use their great power to influence rural high schools really to do something socially effective for the country, most of the necessary readjustment between the two institutions will be easily effected.

II. WHAT LEADING EDUCATORS SAY ABOUT ENTRANCE REQUIREMENTS

From a professor of education in a Western State university we obtained the following judgment on this question:

A State-supported institution must admit to its student body students of moderate ability who would properly be excluded by institutions established and financed by private or denominational agencies. It cannot establish an intellectual aristocracy. If this principle is embarrassing because of the presence of students who are unable to take advantage of traditionally scholarly lines of work,

other lines of work must be established better fitted to such students. . . . I believe in differentiation of entrance requirements for the several courses. . . . In this connection it should always be remembered that high-school students often fail to know until late in their high-school work what they wish to do in the matter of further education. . . . When a student wakes up to the idea of taking a course in the university for which his high-school course was not exactly the best preparation, he should be allowed to match up in the university. . . . Our State universities should not refuse to accept any student who is approved for higher educational work by a high school in his State. . . . I think high-school men ought specifically to express an opinion as to the ability of a student to take up this or that course. . . . As to what subjects should be accepted, . . . university men should be liberal in allowing high schools to meet local demands.

From the dean of the school of education in an Eastern university:

I am committed to the policy of admitting to college any student who has completed, with creditable grades, any good four-year high-school course, regardless of the studies, and who has the recommendation of the faculty as one fit to profit by college work. Further, I would admit any student past twenty-one years of age, without a full secondary course, on probation, and if he proves in the course of the first year that he is able to carry college courses with credit, I would cancel all conditions against him.

From the dean of the school of education in a central State university:

The school of liberal arts in any State college should accept for entrance four years of high-school work without specification of what the units studied in the four years should be. . . . It has been my impression for some time, and this impression is supported by some figures collected recently, that the university can get as good results in particular fields as at present by having the student begin work in those fields without preliminary work in the same fields in the high school. . . . The high school should determine what subjects best fit the student for life; the university should accept these for entrance, and should in the first two years supplement the work of the high school.

From the dean of the college of education in a far Western State university:

The high schools know better than the college what work they can do, and the colleges should take the graduates of the high schools where they find them. The work prescribed for graduation from the college can be made whatever the college desires, but there should be abundant opportunity to get into college after taking practically any of the courses in the ordinary high school.

From the dean of the division of education in a far Eastern university:

It seems to me that the entrance requirements of the University of Chicago embody the important characteristics of a good plan for admission to college. The features of this plan that seem to me especially desirable are as follows:

1. No subject other than English is prescribed.
2. The candidate is required to do a certain amount of consecutive work in the high school in order that he may meet the requirement of a major of three units and a minor of two units.
3. A free margin of five units is permitted, whereby progressive schools may develop courses of instruction that seem particularly valuable either for the purpose of meeting the needs of individual pupils or for the purpose of meeting special demands in the community.

(The editor considers even this plan too conservative and expects more liberality at this university soon. Even Yale and Princeton have recently shown a disposition to meet the high schools half-way.)

From the head of the department of education in a Western university:

It has always seemed to me that our entrance requirements are based on the right principle. The only fixed subject is the use of the English language. For the remainder a wide choice is offered, the university taking the ground that while the high schools may need to set certain fixed requirements, it is not the province of the university to say to the high schools what these fixed requirements shall be.

On the other hand, we feel very strongly that it is best for each high school to do those things which in its community seems most worth while, and that the university entrance requirements should be shaped so as to permit of such a condition of affairs. The university later may pass on the quantity and quality of work done when the student comes to enter the university; but it ought not to prescribe its character for all the high-school students.

These statements may stand as the general judgment of our educational experts. The writer would go beyond these and urge colleges to require students to present evidence not only of English study but of knowledge, skill, and ideals in each of the five lines of social demands of our democracy.

III. NON-ENGLISH LANGUAGES AND NON-ARITHMETICAL MATHEMATICS

The alternative of eliminating all requirements that do not relate closely to the five factors, frequently reiterated, of (1) health, (2) vocational (including domestic) efficiency, (3) citizenship, (4) morality (and social service), and (5) harmless enjoyment, has hardly been considered in this country. Colleges have been more concerned with devising means by which to hold the high school in the ruts of tradition rather than in stimulating them to do their share in educating the youth of the land. Many would even try to use the junior high-school movement to thrust the non-English languages and non-arithmetical mathematics downward upon elementary-school boys and girls. When the entire history of college-entrance requirements is better known, the truth of this statement will be recognized. Colleges of the future may be found, however, giving special credit for health and physical development (or for definite training in these lines), for general knowledge of the world in which the high-school graduates live, for experience and power along the lines of the principal problems of life which all people must face, and which they are to-day facing

poorly because of the lack of a thoroughgoing socialized and American education. Students of education do not object to college *requirements*. They object to requirements of the less valuable in place of the absolutely essential.

Arguments for the Non-English Languages.—It seems desirable to outline briefly some of the reasons for the elimination of the requirements of the variously stated number of "units" in algebra, geometry, Latin, Greek, French, German, etc., both for the general student body and for college-entering students. We shall examine more particularly here the great burden of language study. Latin was practically the entire curriculum of the Latin-grammar school out of which finally came the academy and the modern high school. Some time after the Renaissance it was the principal college subject. Modern languages and mathematics had to fight for college credit for a long time before they got it. But once in, the latter have, for disciplinary reasons, held their own. French and German were not counted for admission until the seventies. The influences which have put the modern languages, for the most part German, into the American high schools were many, but chiefly the following ten sets of facts and notions:

1. The rather servile imitation of the German gymnasium and the French lycée.

2. The desire of many Germans in this country, hyphenated and unhyphenated, to keep alive here the language of the Fatherland. As a boy in Cincinnati, the writer studied in the public schools under an English teacher in the mornings, and under a German teacher, speaking only the German language, in the afternoons. In certain cases one or both of these languages has been helped into our schools by foreign money and influence. Thus in German centres a large amount of time has been misspent in teaching German to many who could have little use for it.

3. The doctrine of "formal discipline," namely, that the value of the mental training which one gets from certain

subjects is sufficient to justify them even if they have little or no content value for meeting any of the great needs of life; *i. e.*, that one need not use these languages in speaking or otherwise in childhood or later life to get more educational benefit than could otherwise be obtained for the same expenditure of time and effort.

4. The theory that a person can learn the languages in school better early in life than in the period, say, from eighteen to twenty-two, a very common notion.

5. The fallacious idea of certain teachers that all or most college students should study French or German, because they will need to read in these languages for advanced scholarship.

6. The fact that the methods of teaching these languages were organized, easily followed without much knowledge or skill, and that until recently the sciences of hygiene, economics, civics, ethics, vocational studies, home education, etc., were largely "without form and void," or not yet organized, selected, and adapted for use in teaching secondary students.

7. The notion that students would probably need these modern languages for harmless enjoyment of leisure—in travel abroad, in reading Molière and Goethe, in singing the songs of these countries, and in interpreting quotations or menus.

8. The theory that a knowledge of these languages along with Latin and Greek contributed considerable ability in the use of English.

9. The notion that students may just as well as not take these languages while in high school or college, since they have the time, and many rather enjoy studying them—that this is a satisfactory use of the time.

10. The conventional idea that pupils should study these languages because the "best people" do so.

Refutation of These Arguments.—What can the educator say when faced by this formidable array? Our ques-

tion here is not exactly whether modern languages have *any* value. The question always is what knowledge, habits, ideals, and appreciations are of most value for meeting the fivefold aims of education in this country to-day, the question asked so ably years ago by Herbert Spencer, and previously by Benjamin Franklin (in his 1789 protest against the classical degeneration of the academy he had started with such high hopes in 1750). Not what we should like to have all pupils study if they had twenty years for education and a life of leisure ahead of them as in ancient Athens! But what our great democratic institutions filled with students from all ranks of society, most of them never entering colleges, need to help them and America meet effectively the issues of preventable poverty, disease, crime, vocational and domestic inefficiency, degradingly used leisure, and a generally low status of educational and scientific opinion! Not what a child of a large polyglot city filled from many lands by almost unrestricted immigration may be able to use if we wish to cater to the use of foreign tongues in America! But what the country and village boy and girl in more typical American communities must have to help the country people provide a balance-wheel to degenerative and unnatural city tendencies.

But let us look at this decimal array, anyway, and see what these opinions and facts amount to.

1. *European Ideals*.—There can be no doubt that the great group of schoolmen who went to Germany for their higher education a few decades ago came back filled with the desire to get into our high-school curricula the subjects which they found there. Some of these men, in high places, still revere the German gymnasium curriculum. The fallacies here were those of thinking that the schooling devised to accentuate class distinctions and fit an aristocracy for awing and ruling the masses should be appropriate here, and that our country, separated by an ocean far from France and Germany, should have any such need of ability to use in intercourse and reading the languages which these

peoples, in close and intimate relationship, in peace or war, very much need. No. Our pupils have always needed English, more and better than they obtained. Our teaching of modern foreign languages has taken valuable time much better spent on this and similar American problems. They need Spanish more than they need German or French, and Spanish should be made elective in only a relatively few high schools of the land. "Go slow about introducing subjects not found among the minimal essentials" is a good conservative rule. We are opposed to any of these subjects as general requirements for all students.

2. *Immigrant Demands*.—It was probably unwise to let the sentiments of even very desirable alien peoples here dominate curricula enough to make possible the recognition of German and French as staple subjects. This has tended to obstruct the Americanization of our aliens by eliminating from their possible courses subjects which function directly in Americanization, such as American citizenship, and by cultivating such close attachments for foreign countries as to prove a menace to us in our international crises. Why not teach Spanish, Italian, Japanese, and Russian in all high schools? Simply because we have not had powerful groups of sentimental zealots and outside forces to push them in! Once get a subject into the schools and the tendency is for the schoolmaster and the public to fall down and worship it as one of the indispensable pillars of the school edifice! Our language and our curricula must be American. Through a very few linguistic specialists America may, as Professor Snedden points out, keep thoroughly in touch with France and Germany. This group may be smaller than one one-thousandth of the number of high-school students who are now compelled to study these languages, even though exceedingly few learn them well enough to use them.

3. *Formal Discipline*.—The doctrine of broad formal discipline is also untenable. We probably get a modicum of general discipline, or training in "reasoning," in "mem-

ory," in "will-power," etc., in any of the supposed "faculties," from any similar groups of purposive activities. The teachers in a large number of Eastern secondary schools and colleges, for example, as shown in a study by Thorndike, recently attributed little less "discipline," so called, to waiting on tables and playing on the college football teams than to the old "classical" or "cultural" subjects.

The literature on this subject is quite extensive, and we have many psychological experiments to test the old theory. Judd, in his "Psychology of the High School Subjects," expresses the most conservative views on the problem and becomes almost reactionary in meeting the arguments of Thorndike, who expresses, in his "Educational Psychology," the more progressive views. A sound middle position would be to teach no subject unless it can be justified in content, or subject-matter, as being clearly and plainly worth more than anything that could be put into its place for meeting the principal aims of education. "Formal discipline in its sweeping interpretation is an unproved hypothesis for which there are more refuting than supporting data."

We cannot take the time of students in our schools to teach them subjects, costing more per pupil-hour than others more essential, which have little more than vague opinions and tradition back of them.

Farm carpentry, agricultural, domestic, and commercial subjects are costly because of the equipment necessary and supplies used, but the studies of Professor Bobbitt show that the non-English languages and Latin cost per pupil-hour of instruction in a typical city as much as or more than do shop work, mechanical drawing, and commercial subjects (10.3 cents of a dollar each), while the modern languages cost even more (11.4 cents), the average of all the other subjects being only a little over seven cents. Greek was put out of the Newton, Massachusetts, high school only a few years ago because, as Superintendent Spaulding said,

his cost accounting showed that Greek was costing far more than it was evidently worth to the people supporting the schools, considering what other education might be purchased with the money.

Wait until the people generally learn of such facts, and their present distrust of the formal-discipline notion will lead them to challenge effectively this overburdening study of "words, words, words," especially foreign words. We need some of the wisdom of Horace Mann, who early protested against putting the cart before the horse in education—in requiring what should be electives and making elective or non-existent what should be required of all. If we could compute the number of preventable deaths caused by the crowding out of hygiene from our high schools in the last fifty years, and see the miles of dead march by for months in columns of four, we should possess in this alone sufficient proof and intense realization of lamentable waste.

4. *Is Childhood the Best Time?*—For those who believe that "the only time to learn languages is in childhood and not in the college period," we refer to the studies summarized by Professor Parker, of the University of Chicago, in his volume on "Methods of Teaching in High Schools" (Ginn) in a chapter entitled *The Influence of Age on Learning*. Here again naïve opinion based on isolated or peculiar instances falls before expert psychological tests. The ability to memorize and retain a language vocabulary *increases* gradually with experience and age up to about twenty, as does the ability to reason or any other mental trait. It certainly does not decrease. Parker speaks ably against having any large proportion of *high-school* students studying foreign languages on the grounds that they can learn them much better in less time and with less loss in relearning if they postpone them until the college period, and that such high-school teaching is poor social economy. We can here do little more than refer to the chapter. More of such open-minded investigation and analysis of this problem is needed.

Practically all colleges now have beginning courses in French and German. Why not have them for practically all students who will be required to study these subjects in college? (And why not have Latin and non-arithmetical mathematics also begun there instead of requiring them as we now do of about a million *high-school* students?) We must conclude that the time to study foreign languages for those who are going to college is in the college period. Practically no others will need them sufficiently to exclude other subjects by taking them.

5. *Are They Needed for Advanced Study?*—Parker meets well also in the above-mentioned chapter the fifth argument, that students need to study the non-English modern languages in high school because they will need to read these languages for advanced scholarship. We beg to quote his words:

Let us consider 1,000 students who enter high school. Of these, probably 500 will not continue to graduation. Practically none of the non-graduates will have occasion to use French or German as a practical tool for further study. Of the 500, 250 may go to college. Of these, 100 may graduate and be eligible to become candidates for the doctor's degree. But as a matter of fact only 10 out of the original 1,000 will ever do serious graduate study to the extent of receiving the master's degree (that is, one year after graduation from college). Probably not 5 out of the original 1,000 who entered high school will become serious candidates for the doctor's degree. Of the 5, some will try to choose topics for dissertations in connection with which they will not have to use French or German. Of those who secure the degree, very few will continue to do productive research work which will require a reading knowledge of a foreign language. Many of them will get positions as professors in small colleges, normal schools, or high schools, and do routine teaching the rest of their lives.¹

The professors of chemistry and of engineering in the college could be answered in much the same way. Their

¹ I recommend for reading also the passages in Professor Bobbitt's "Survey of the School System of San Antonio, Texas," on these phases of wasted effort, as well as his volume on "The Curriculum" of later date.

students after years of study do not gain facility in reading these languages. They drop them as soon as the professors' backs are turned. They sensibly depend upon translators to put into the English technical journals and books the most valuable writings of the foreign investigators. Most of them cannot keep up with even the literature of their profession published in English, let alone the foreign technical journals. A questionnaire sent by the writer to five hundred graduate engineers all out of college over ten years showed that this is true for them and that they regard time spent on French and German as largely wasted. Soon we should have to read Japanese, Russian, Spanish, Italian, and other languages to get in the original the chief scientific productions. The whole ideal is largely impractical and the extremely few really benefited will not warrant wholesale required-foreign-language study in high schools. A few specialists who really know the languages can each month review for engineers and technologists the principal foreign works in our English journals of technology.¹

6. *Are There Unmet Demands?*—These languages need not now be taught because there is nothing else to teach. Excellent courses in American citizenship, in applied ethics, in elementary sociology, in industrial, agricultural, and home education, in hygiene and physical development, and so on, have been well worked out. Their pedagogy is being developed, some now being organized as a series of projects, or problems, almost as closely chiselled as the "pure" (unapplied and inapplicable) mathematics of the old mathematician, and at least as well organized for any kind of "mental discipline" as foreign languages.

Besides, these socially directed subjects possess the tremendous psychological advantage of having a content that is full of suggestions and associations with the affairs of life, making possible the recall, use, and functioning of knowl-

¹ See Professor C. R. Mann's bulletin of the Bureau of Education on "The American Spirit in Education," No. 30, 1919.

edge, habits, ideals, and appreciations gained, whereas the pure mathematics and non-English languages connect exceedingly little with the concrete lives of most people out of the academic world. It could be truthfully said of many high-school courses of the type which conforms most closely to the linguistic college-preparatory ideal, that there are more socially valuable, educative, teachable, and interesting subjects *outside* the curricula than within them. We live at a fortunate time when first-class text-books have been worked out for most of the subjects which need to be taught in the high school and when each year sees many marked improvements. The organization of introductory economics at the University of Chicago as a series of *problems* by which students gain power to think on the economic problems of life, rather than on those of abstract mathematics, is very suggestive. Professor Parker has set a good example to writers of books for teachers, which in the past have been very unpedagogical and hard to learn or teach, by furnishing with his volume on "Methods of Teaching in High Schools" a volume of projects and problems in application. The new general science texts and laboratory manuals are also of a new and vital character. Professor Sharp's work at the University of Wisconsin in the field of high-school ethics, or moral instruction (taboo for a long time), is highly suggestive in another field. (See his volume on "Moral Instruction," Bobbs-Merrill.) The books by Beard and by Dunn on citizenship are of a new order. The right use of leisure, recreational and avocational activities, are being developed and made available for school procedure.¹ A great wealth of educative material closely related to the aims of education lies before us. Why remain bound to the curricula of those who were without a knowledge of psychology, without subject-matter outside of the "classics,"

¹ See, for example, the recreational surveys of Springfield, Ipswich, Madison, and Cleveland, all made within recent years and the first of their kind. (Recreation Division of the Russell Sage Foundation, New York.)

and were "hard up" for something to put into the high-school course to fill up four years of time?

7. *English for Harmless Enjoyment*.—The avocational, cultural, or leisure argument for the study of foreign languages by high-school and college students is about the only one which seems to have any weight. We are not speaking of a refinement of mind, a "discipline," but of such harmless enjoyment as that of reading French or German plays and novels in the original, of singing French and German songs, being able to interpret quotations in a foreign tongue, understanding French fashion-terms and menus, being able to talk the language when abroad, and so on. The answer here is that the pedantic habit of sprinkling pages with a foreign tongue is rapidly dying out, that the average high-school or even college student will never see the Rhine or the Rhône, that admirable translations of the worthiest foreign literature soon appear—far more satisfactory for study than the results of the kind of knowledge of these languages even the best type of student usually obtains—that we can get along with the fashions and the menus pretty well without sacrificing years of time in foreign-language study, and that in the years spent in such study we could be gaining education in many types of avocations and harmless enjoyment which are now denied us. We are not organizing our high-school or college courses especially for academic specialists, for the leisure classes, nor for any who can afford to fritter away precious time and energy. Education in America means something else. Our schools have not yet proved themselves very able at teaching essentials.

8. *Need They Be Taken as Electives?*—The eighth argument, that students may just as well as not take such subjects while they are in high schools, shows a lack of knowledge of what should be done in the high school, how little time there is for extras, and how much time and money is lost by taking them. Many speak for these languages in the high school with as little comprehension of purpose and

additions to ability in English from foreign-language study, they are bought at an exorbitant price. And if there is an increase in grammatical knowledge, such knowledge, as shown by many tests, does not correlate with ability to use good English.¹

Other data appearing in *School and Society* for August 14, 1915, and November 20, 1915, bear out the same general conclusion. A little more scientific investigation of this group of problems will be sufficient to prove the general proposition. The efforts and pleas of Benjamin Franklin and of those who started high schools here to achieve real democratic secondary education may yet be realized. The rural consolidated school with its probable six-year high-school course must fight for the essentials of rural education or degenerate into formalism like all its predecessors, the grammar-school, the German gymnasium, the French lycée, the English public school, and the old American four-year high school of the time of the "Committee of Ten."

10. *Should They Be Required or Elected Because It Is the Thing to Do?*—The "conventional" value, although strong for getting students to take foreign-language studies including "the classics," has no weight as an argument for costly courses in our American high schools. Booker T. Washington said that after the Civil War the negroes had but two great aims in life. One was to hold office, thus realizing their sovereignty as free citizens, and the other was to *study Latin*. The latter meant to them a liberal education. The "young folks" of their wealthy owners had been going North for Latin, with some French and German, and had come back able to chant certain cabalistic conjugations, thus striking awe into those who knew not the charm! We have not the time, energy, nor money to waste in meeting such conventional, traditional, aristocratic aims as this in our schools and

¹ See chapter on Grammar in the editor's volume on "Teaching Elementary School Subjects" (Scribner).

colleges when real culture and real efficiency must be developed for meeting the stirring problems of life which press on all for solution.

Such doctrine is not utilitarian in the sense of a mere bread-and-butter aim. It is a plea for "culture." Let us make neither academic nor vocational specialists of our boys and girls without furnishing first a broad cultural foundation meeting the first aims of education. We want American boys and girls to get an American education, not a wooden-nutmeg substitute. The ten arguments for the modern foreign languages when examined are found without force.

IV. THE OUTCOME

What has been said above applies largely also to the study of the dead languages, Latin and Greek, and of abstract non-arithmetical mathematics, *i. e.*, algebra and geometry. We cannot here take up the arguments given for these studies. We should attempt to prove by analysis and verifiable data that these subjects give no special "disciplinary effects" which are more valuable to young Americans than they could obtain by other use of their time, that they do not especially develop the "memory" or the "reasoning powers," or those of "accuracy," "discrimination," and the long list frequently mentioned by those with vested interests in the subjects.¹

We should attempt to demonstrate that the thinking in mathematics is unlike that which we must use in meeting the problems of life, as analyzed by Dewey and others, both in method of mental activity and in the content or subject-matter. We can gain power in solving the manifold problems of life by solving them, by dealing with them in class or community, and not by dealing deductively with x , y , z ,

¹ See Moore's new volume on "What Is Education?" (Ginn), chapter on The Doctrine of General Discipline; also Moritz's article in *School and Society* for May, 1918. Bobbitt's "The Curriculum" has been favorably mentioned.

or the lines and angles of geometric figures. But we must leave these subjects for further examination by our readers and the investigators who are to-day busily studying subject values.

Why did the schoolmasters of the past fasten upon our school traditions the method of attempting to educate children backward, indirectly, abandoning the near and the evidently educative, and seizing upon far-off, hypothetical subjects which only a remoteness from the experiences of real life and a very vivid imagination would ever lead one to regard as educative in any large degree? The history of education reveals that many lines of non-reason in the form of blind imitation, mere tradition, and other-worldly aristocracy gradually converged to bring about this anomalous situation to-day. Fixing our eyes on the social aims of education, on the nature and needs of the youth to be educated, and perseverance in the scientific evaluation of subject-matter, results, and methods are the only means which will help us to break away and inventively and creatively to construct the cultural¹ education of future America. For rural education in consolidated schools, the need of constant use of such a method of establishing a real country education for country people constitutes nothing less than a social emergency in these early years of its development. We urge liberty for experimental adjustment.

PROBLEMS IN APPLICATION

1. What special applications to the consolidated rural school can you make from the principles developed by Professor Bobbitt in his volume on "The Curriculum"?
2. What important domestic problems which women meet on taking responsibility for a rural household are untouched by the ordinary home-economics' curricula for girls? Could the school wisely undertake to prepare girls for these responsibilities, considering other demands on the time available for schooling?

¹ See Dewey's definitions and discussions of culture and character in Monroe's "Cyclopedia of Education."

3. Which of the college-entrance plans suggested by the writers of the letters in the chapter fit best your own State colleges?
4. What additions to the argument for the elimination of so much foreign and dead language study in rural high schools can you make?
5. Which of the arguments of the editor would you contest?
6. What phases of history are of most value to rural-school pupils, elementary and high?
7. What recreational, avocational, or cultural needs of country folk as you know them are poorly met by the typical rural high school? Do algebra, geometry, Latin, French, and German satisfy these needs?
8. If possible, secure a survey of rural recreation made by some competent persons, and note the cultural needs there set forth.
9. What parts of the United States are most progressive in experimentally developing real American and rural curricula for meeting dominant rural-life needs?
10. How can you explain the great surplus of books and articles on methods of teaching, and the very few until recently on curriculum-making?

BIBLIOGRAPHY

1. Bobbitt—"The Curriculum." Houghton Mifflin Co.
2. Inglis—"Principles of Secondary Education." Houghton Mifflin Co.
3. "Cardinal Principles of Secondary Education." Government Printing Office.
4. Parker—"Methods of Teaching in High Schools." Ginn.
5. Johnston—"High School Education" and "The Modern High School."
6. Monroe—"Principles of Secondary Education." Macmillan.
7. Moore—"What Is Education?" Houghton Mifflin Co.
8. Vogt—"Rural Sociology." Appleton.

CHAPTER XVI

THE OUTSIDE OF THE CUP—RELATIVE VALUES IN ENGLISH INSTRUCTION

PRELIMINARY PROBLEMS

1. What types of fiction and essays have been collected that develop high ideals of country life? (See, for example, Bowman's books, published by Scribners.)
2. Do any of these compare well in their contribution to the fundamental aims of rural education with "selections" now used?
3. What books and magazines could well be incorporated in the reading courses of junior and senior high-school youth?
4. What is the most common form of writing, of "composition," that people do in ordinary rural life? Where could these letters be found?
5. What per cent of the composition time in school is devoted to training in letter-writing? Would the defects and merits in the collected correspondence of a typical rural county for one year indicate that the time spent was sufficient for ordinary people?

I. THE NEW AIDS OF ENGLISH TEACHING

One of the former "best sellers" by a well-known author bears the curious title, "The Inside of the Cup," which he justifies by an apt biblical reference. This suggested the title for the present chapter, which is incorporated here more as an illustration of how to use the social aims of education in selecting all subject-matter than because of the supreme value of English. My text is taken from the writings of a modern religious teacher and diplomat. He says somewhere that we should all drink deep from the cup of knowledge, but warns us that we must not become so deeply engrossed in the beauty of the tracery and the coloring of the designs on the cup as to fail to drink and pass on refreshed and invigorated.

The peculiar temptation and sin of the teacher is to become engrossed in the study of the *vessel* of knowledge and to forget his function as the nourisher of souls. It is especially the temptation of teachers of English, although the mathematician, the historian, the linguist, and the scientist in their teacher's chairs all likewise succumb. Teachers of English have before them a multitude to be fed with living education; they have the greatest opportunity available in the schools of to-day to mould the character of the American people; their chief fault, which we attempt here to dissect and diagnose in order to cure and prevent, is that of not discovering and realizing their peculiar social function. Too often they are not guided by the great aims of education, but, turning away from life, they fix their gaze on the technical linguistic properties of the so-called classics and of the compositions they teach. They become engrossed in the contemplation of the outside of the cup.

Relative Values and Educational Aims.—An understanding of relative values in the teaching of English can come only from a study of educational purposes and aims. A thing is good or bad, valuable, less valuable, or valueless, in so far as it functions more or less efficiently in the achievement of the purpose for which it is used. The teacher of English, in the upper-graded or six-year high school especially, performs part of the work of educating boys and girls in early adolescence. Her work must contribute to the aims of education in this period. If we can get before us the principal purposes of schooling, we can obtain standards by which to judge the relative values of all teaching and of the special work of the teachers of English.

The traditional aim of schooling inherited by the high and upper-grade school is that of formal discipline, which implies that it does not matter what we study, provided that we agonize over it sufficiently. This relic of medieval asceticism was originally brought forward to justify the pedant schoolmasters in holding the only subject which they

could teach, namely, Latin grammar, in the Latin-grammar schools after the time of Elizabeth, Bacon, and Milton, when Latin went out of use as the language of scholarship and diplomacy. Other names for this aim of teaching, such as "mental discipline," "mind-training," "culture," "development of the mental faculties," "training of the powers of reasoning, concentration, discrimination, memory, etc.," were, and are still, commonly used. The principal of a large secondary school said to the writer only recently that he wanted algebra and Latin taught in the first year in order to give his students "minds to work with," to "develop their power to remember and to think." It is little wonder that the English teacher, who for a long time was not recognized by classical teachers and the colleges because she did not hold to this doctrine, finally came around to the same false standard that English is to be taught as a discipline and that all other values are by-products.

This aim for both elementary and secondary schooling has been rejected by all modern educators. We can get training and valuable subject-matter at the same time; and the training which is divorced from its concrete applications will largely fail to function. We must look elsewhere for the aims and purposes of modern education. Any scrutiny of the quadrupling of attendance from all ranks of society in our high schools in the last two decades, of the manifold types of work now being carried on in them, and of the numerous grave social problems curable by sound schooling, will show that the aim of formal discipline is no longer an actual or sufficient guide for democracy's public schools. Out in the country, where people are so close to nature and the great vital facts of life, such an aim for the consolidated school is farcical and ignoble.

The Fivefold Aim.—The chief *social* aims of education, which the leaders in education from Spencer down have recognized, and which the recent great educational surveys are bringing out clearly into the light, are about five in

number. They form the principal aims because they furnish the principal problems of the American people. These five aims, stated before as phases of social efficiency, may be reiterated here as follows: (1) Vital efficiency—health and physical development; (2) vocational efficiency—agricultural, domestic, professional, industrial, etc.; (3) civic efficiency—citizenship; (4) moral efficiency—morality and social service; (5) avocational efficiency—recreation, harmless enjoyment, and the right use of leisure.

Most teachers in public schools or elsewhere will readily accept these five great purposes as the purposes of education. But these are not the aims which have established either our curricula or methods of teaching. Our schooling is not yet based on them. For instance, about a million people die each year in the United States of preventable diseases due largely to preventable ignorance, and yet our schools (especially the high schools) give little or no effective education in hygiene and physical development for all. The status of our vocational (including domestic) efficiency is about as low as is our citizenship, and yet most public schools give little or no effective training along these lines. In general, a statement of the pressing problems of the American people which can be solved largely by means of an education that hits the mark, when compared with the subjects and methods of a majority of our high schools, will instantly show that we are doing other things than putting first things first and meeting the dominant unmet educational needs of our people. A number of English teachers realize this, and their meetings and journals are taken up to-day with statements of dissatisfaction with the results of their work, a most favorable sign, since out of such dissatisfaction grows better adjustment. The best results so far are such studies as the national report on the reorganization of English in secondary schools, new and practical texts, and socialized courses.

II. READJUSTING THE SUBJECT TO RURAL NEEDS

Application to English.—Now what can be done to pupils to help them to produce the changes which will promote this fivefold aim of education? The psychological changes which can be produced in pupils are about four in number: out of our golden cup we can pour, to all, educational nourishment which makes for changes in *knowledge*, in *habits*, in *ideals*, and in *appreciations*. With the five aims arranged vertically at the left of the page, and the four types of psychological changes which we can make in individuals at the top of the page, we may make, by means of vertical and horizontal lines, as shown in a previous chapter, a chart, into the twenty squares of which we can write the minimum essentials of an education.

Then we can ask of each subject and course of study now in the programme of studies this question: What are you contributing in the way of knowledge, habits, ideals, and appreciations? What are you doing for *health*? For making the *home life* of our people better and brighter? For solving our grave *vocational* problems? For improving harmless enjoyment and the right use of *leisure* for our people who are to-day struggling for the eight-hour day? What do you, Latin, Greek, French, German, algebra, formal grammar, or geometry, taken one at a time for scrutiny, contribute to these five great aims? What courses must we throw out entirely, or, at least, greatly modify? What must be put into our courses to meet the great problems of morality and social service? Do we need a course in applied ethics? What about citizenship? Can we meet this problem effectively by giving only a portion of the high-school students a brief half-year course in desiccated "dry-bone civics," or do we need courses at least a year in length, with such beginning texts in the grades as Field and Near-
ing's "Community Civics" and Dunn's "The Community and the Citizen," and in the high school with Beard's "Ameri-

can Citizenship" and others? What about the methods of teaching and relative emphasis on different phases of subject-matter and training? Is it more valuable to know how to be a citizen at home and to help to clean up the community and to work for its welfare, or to pass good examinations on the tenure of office of judges of the United States Supreme Court, the process of impeachment of a president, and on the details of the Constitution?

Now, bring English up to the bar. What aims are you promoting? Do you put first things first? You are the only subject required without alternatives in all high schools. From being a despised creature, unrecognized by the colleges, and even by other teachers of the school, you have crowded in until in the high school you take three or four years of each student's time. You are the chief educator of the child at this age in point of time available. What have you to show in the way of that knowledge and those habits, ideals, and appreciations which will most effectively meet the five principal educational needs of our people, or has English no responsibility for helping the people solve these five principal problems of life connected with health, vocation, leisure, citizenship, and morality?

Do we need you at all, Miss English? It was formerly thought that the other teachers of the school could do your work, and they did it. Cannot children be pretty well understood, and do they not get along fairly well in the world, without you, *i. e.*, if they miss high school or drop out in the first year, as a large percentage do? Cannot all high-school teachers be trained and compelled to correct grammatical and other errors in the speech and writing of pupils, and thus save much time now spent on English teaching in one class, with a comparative neglect of it in all others? If we can get into the six-year high-school courses the essential educational subjects relating closely to the five great aims of education, and then train our secondary teachers to develop not only changes in the information or knowledge

of pupils but to develop also habits, ideals, and appreciations (including attitudes, tastes, perspectives, prejudices, etc.) for each of the essential subjects, shall we find it necessary to have teachers of English at all? Probably not. Some of these schools are already trying the experiment of using good literature in connection with other subjects, and providing composition and oral English correction in connection with all school work. But that time is far in the future; we yet have a great immigrant population for our melting-pot, and more will follow the war unless immigration is restricted; and we confront a present situation. Undoubtedly it will be of great service for the English teachers, however, to look upon themselves for the moment as assistants to the other teachers of the school, who are more or less directly serving the ends of health, citizenship, morality, vocational efficiency, and so on. The teacher of English thus has the opportunity to complement their work and do the phases of the general task which they cannot well promote.

Her activity would then probably be directed more along the following lines: (1) The cultivation of those great ideals and appreciations which make for social efficiency and social happiness along each of the five lines indicated above; (2) assistance in the development of certain abilities or habits along the lines of both reading and expression, such as the ability in public speaking for the aim of citizenship, and the reading of literature which promotes the five-fold aim; (3) assistance in methods of study, in outlining and organizing tasks, finding references and seeking data, getting the kernels out of paragraphs, chapters, books, and so on; (4) especially perhaps, the cultivation of habits of harmless enjoyment for the right use of avocational interest, of leisure, which along with ideals is apt to be neglected by other agencies of the school, this cultivation being, however, largely along lines of the use of the English language (including study of the drama, good literature, etc.);

(5) seeking, by the use of suitable literature, to strengthen the children along lines neglected by other teachers. Thus the English teacher can develop the emotional life of pupils largely neglected by other teachers, promote the great ideals of the race, and help in all five lines in fundamental and supplemental ways.

III. LOOKING FORWARD

Prospective Changes in English Instruction.—Some of the principal changes which will take place in English teaching of the next decade or two, following such educational principles, we may, for brevity, venture to state as follows:

1. The literature selected for reading will be chosen on a social rather than on a technical, literary, or craftsmanship basis. From the great treasury of literature available for education along the five lines, those productions will be selected which function best for children and adolescent youth (the psychological basis), and from the latter those which are the best examples of literary art. Last and least will technique be the basis; this will be, not the outside of the cup, but what it contains for American boys and girls. First get literature promoting the fivefold aims of education; second, sift it psychologically, using pieces which have great interest and moving power for different individuals and groups, and, third, choose, if possible, good examples of literary art.

2. Literature will probably not be selected for the reason that it illustrates the history of English literature. The latter subject, sometimes taught as a separate course termed "the history of English literature," will probably not be given, since it does not meet the pressing needs of our people along the five dominant lines as well as other more social and less technical subject-matter. General history will thus have more time for such literary history as relates closely to the aims of history teaching.

3. The literature selected will probably be largely modern literature, dealing with modern problems in a modern setting such as confront the American people to-day. "Comus," "L'Allegro," "Lycidas," "Il Penseroso," "Paradise Lost," Burke's "Speech," the "Sir Roger de Coverley Papers," the "Essay on Lord Clive," and others of this type will probably be displaced, to the horror of the stylist and literary historian, by the literature of the future written in the last few decades. Current magazines and newspapers will be used even more than six to ten minutes a day, as they are now so well being used in many schools. Of course we may go to ancient Greece for some literature that gives by contrast and novelty great ideals of health and citizenship, but not necessarily. We are to choose the literature that does the work, and are thus interested rather in the psychological and sociological effects of these selections as taught in the school than in the selections as archeological specimens.

4. *Citizenship*.—A reasonable share of this literature will promote by interesting and familiar example the great local and national ideals of citizenship. Several years ago the writer went as a school principal to a large Western city immediately after the horrifying exposures of civic indifference and political rottenness there. Steffens had published "The Shame of the Cities"; and the shame was there. Did the people of that city afterward rise up and demand that the public high schools, in which the leaders are trained, begin at once to engender ideals, attitudes, tastes, and appreciations along the lines of effective local citizenship? They did not, at least not directly. They became vaguely dissatisfied with the schools. They had intelligent people go and visit high-school and other classes and see what kind of education was given there, which has finally led to considerable reorganization. But little increase of direct civic education or of civically directed literary education has yet resulted because the guiding aims set up above

were not consciously used as guiding standards for the selection of matter and methods. The fundamental subjects are those most closely related to fundamental human needs, and these are, therefore, those closely related to the five aims, like hygiene, and civics, and the minimal essentials of the tool subjects, like reading, spelling, writing, and arithmetic, necessary for these. The reader is urged to obtain from the Bureau of Education the recent co-operative volume produced by the leaders in this field on "The Reorganization of English in Secondary Schools." Although conservative and not fully directed by the great aims, it will insert a great entering wedge into the traditional English instruction. This is the first and best effort in the direction of English instruction guided by the aims of education. The bulletin on "Cardinal Principles of Secondary Education" and Professor Bobbitt's volume on "The Curriculum" will also be of value.

In what way does your state, your county, and your community, Miss English, need a development of civic ideals? Discover these weaknesses, find these needs, and then look about for literature that will do the work desired. We need not look far. The ideals and efforts toward better conditions of life to-day have found expression in as noble a literature as has ever graced a previous age, and in far richer abundance. This literature has for most adolescents a stronger appeal and a far richer and clearer suggestive value for present life-guidance than most that the more remote past has furnished for other times, valuable as some of it is. For good content and technique as well as interest, Bruere's articles in *Harper's Magazine*, for example, will probably be far more educationally influential than Burke's "Speech on Conciliation," used as an example of exposition. Away with our subserviency to those estimable college professors of English who, interested rather in literary technique, dissection, and the craftsmanship feelings aroused in themselves by certain selections than in the use of literature as

an educational instrument for the American people, have from their high chairs handed down certain technical master-pieces for all high-school students, willy-nilly, to study! We very much need a large committee of high-school teachers to discover and to try out experimentally a great many selections which tend to leave a deposit of *civic* ideals and attitudes in our pupils, such literature as Mrs. Cabot and others have collected for the elementary school, for instance, in their volume on "Citizenship." What a great work for American citizenship could thus be done, and how well then could the several years of required English be justified. Any one studying the various civic leaflets issued by the United States Bureau of Education from the standpoint of English can readily see that English instruction can do very much to promote directly civic efficiency and still not invade the field of regular civic instruction. In the rural consolidated school the English teacher has practically a virgin field, and should be bound neither by college nor city precedents. The needs of the country community in the way of ideals and aspirations, of civic and other social standards, are the bases of selection.

5. *The Ideals of Our Democracy.*—If teachers of English were to make a survey of the dominant unmet needs of the American people, and were then to make a list and a classification of the ideals which, if made common, would best meet these dominant needs, we should have a good guide for the selection of literature for our high-school pupils. A very helpful list will be found in Doctor Bagley's volume on "Educational Values" (pp. 175-179 and 214-215). We can only mention them here, leaving out his descriptions and definitions. Among those great ideals which he claims must be made the driving forces of all Americans we find the following: respect for the feelings and rights of others, tolerance, equality of opportunity, property rights, chastity, monogamy, parental love, respect for the aged and womanhood, sympathy with suffering and affliction, self-sacrifice

and self-denial, personal integrity, loyalty, friendship, cleanliness and personal purity, altruism, achievement, truth loving, simplicity, work, health, initiative, independence, patriotism, national unity, local self-government, right use of property, ennobled ideals of sexual love, ambition of the right types, peace and good-will, unprejudiced observation and inductive thinking, scientific method, efficiency and expertness, respect for authority, and human brotherhood.

The pedagogy, or methods, of imparting ideals Bagley and others have also treated, and we cannot discuss this here. Parents send their children to school to be lifted up and inspired by such ideals. English teachers can from such a list get a sense of relative values in their work that the old-time teacher, using selections largely for their historical or technical qualities, never attained. Such an emphasis upon the essentials of education will, moreover, greatly increase their dignity and the respect for our profession. It is certain that the Boy Scouts, Girl Scouts, Camp-Fire Girls, and other similar movements, have first picked out the great ideals found imperatively necessary in our people and have then sought literature and devised methods to establish them deeply in the souls of our people.

Many are the illustrations which might be given, if necessary, of the power of ideals in life and of our ability to transmit these ideals through educative instruments. A teacher in a school of which the writer was once principal used with success carefully selected literary productions for meeting, generally well in advance, cases of discipline. She used, I remember, among other books, White's "School Management," which contains such selections to meet many kinds of disciplinary problems in and out of school. Temporary and life-long ideals were undoubtedly there cultivated in many different groups of pupils. Professor Sharp's books on "Moral Instruction" suggest many pieces of literature that will meet specific needs through inculcating spe-

cific ideals and aspirations. There is a ridiculous irony in our method of criticising people who are products of our school systems for conspicuous lack of certain ideals which in no part of the school organization from kindergarten upward have been taught, and yet which children ten years of age can possess for life when properly taught. What we want in society we must put into the schools, and any elimination of dead-wood must be rigidly made to make this possible.

6. *Avocational Training.*—Training in the right use of leisure, in avocational activities, or, as Parker terms it, harmless enjoyment, is rapidly coming to be a very important educational aim of the public school. Two chapters in this volume are taken to deal with it because of its comparative neglect in rural regions. The late State Superintendent Schaeffer, of Pennsylvania, a few years ago made an address in many places against giving the eight-hour day at once because our people, untrained in the right use of leisure, would misuse it and bring about their own degradation. Here is a great truth. The eight-hour day of work, the eight hours of sleep, and the eight hours of leisure are, however, rapidly coming. The Saturday half-holiday and various picnic and other days are now here for many country people. A life of constant labor defeats the end of existence. Happiness and self-realization are impossible. "Life as a fine art" is out of the question. We are going to obtain leisure, and the school and the English teacher, especially, must train for this phase of life. The county and state travelling, circulating, and school libraries must be made to do their share.

How can literature be used to promote the harmless enjoyment of leisure? Undoubtedly a reasonable and healthful amount of reading of the right kind would, for enjoyment alone, be desirable for most persons. This reading will be of the most varied kind, because of the great natural variability among individuals, and because of the many



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The library wagon of Washington County, Maryland, stopping at a farmhouse



A well used library room

artificial variations brought about by the manifold occupations and environments of life to-day. People who do not like the *Atlantic*, *Harper's*, and *Scribner's*, but who do care for the newspapers, *Adventure*, *Detective Stories*, *The Argosy*, the *Scientific American*, the *Saturday Evening Post*, or *Modern Electricity*, cannot be classed once and forever by the English teacher as perverted, hopeless, and uncultured. A number of the stories in cheaper magazines are of a far more healthful mental tone and better for invigorating and emotionalizing for a time the life of multitudes of young people than are many of the stories in either *Harper's Magazine* or the *Atlantic*. The best farm papers are to-day securing literature of prime value for rural ideals. Yet many times these papers are unknown to pupils and parents. "Many men of many minds" need literature of many kinds.

Many teachers have shown that these magazines and newspapers of many kinds can be procured by the average school, and that pupils and parents may gain habits of harmless enjoyment through reading initiated by those English teachers who follow the ordinary laws of habit formation, starting with the natural instincts and interests, giving much practice and repetition in a favorable social situation, and studying the social situation in order to insure that the habits shall find stimuli in the outside environment away from the classroom. Other teachers have done the same. I look forward to the time when such teaching may be organically related to the English work, so that six or more minutes may not have to be taken out of the regular lesson as somewhat extraneous work. The reading habit is important for the social welfare. It is far more valuable than many of the habits inculcated in the ordinary routine school work of the usual type. Let us have the courage to put our work in touch with the world to-day, and be proud of it. Harmless enjoyment and recreation are great needs, as our "movies," dance-halls, and many other institutions thriving on this interest indicate. Here we find English in touch

with the old cultural, aristocratic ideals of the subject, and at the same time becoming democratic and social. It is bringing leisure and culture rightly used into the home of the many, which is a large part of the mission of America.

7. *Moral Efficiency*.—What are the *moral* problems of your community and of modern life? What examples can you choose from literature which will function in helping high-school graduates, or leavers-before graduation, to meet the insidious and character-straining temptations of the world of industry and social life to-day? Do we possess any literature dealing effectively and artistically with these problems, that will arm pupils beforehand to meet the foe, under whatever guise, with the right attitude? Undoubtedly any one month's issue of the magazines will furnish several such. "Seek and ye shall find." We do not need to rub in the moral. The right literature does its own work, without extensive moralizing and "intensive" dissection. At present many great moral and social problems of rural communities are untouched by any school literature. In fact, much of it points to the city, and is the very same as used in the largest cities! We as much need literature in schools that relates closely to rural moral problems as we need texts that relate closely to rural civic problems.

The average man and woman engaged in a vocation to-day is engaged in social service. The butcher handing meat day by day over the counter is feeding and making strong and vigorous the men and women of his community, who are also working for him in return. The farmer is nourishing the world. But such an attitude toward his work, such an ideal of his daily business, seldom glorifies the worker. To him "business is business," which means that it is, in spirit, an individualistic war to the knife for advantage, supremacy, and financial gain. The laborer watches the clock through the irksome and uninspired day; the employer speeds him, fights shorter hours of labor, "boodles" the legislature to beat out workingmen's compensation and

child-labor laws, and so on. The farmer is often an uninspired drudge, very sordid, overworked, reactionary, and individualistic. Those who rise to the dignity and professional spirit of servants of the public weal are vastly in the minority. But these few have made professions of their trades. Wholesale arrests of butchers recently occurred because they had put poisonous preservatives into their meat products which destroyed rather than restored the strength of their neighbors and fellow servants. Farmers have been found who have fought or been indifferent to community improvement, who have, figuratively and actually, put their larger potatoes and apples at the top of the barrel, who have done right only as a policy, not from a dynamic ideal of service. Many blindly oppose any school development, and then wonder why their children so early wish to "break home ties." Cannot the generous social-service spirit be inculcated in the pupils of the consolidated school?

You will answer that it can, and that these acts typify too large a part of the spirit of the work of our present high-school graduates and leavers. We are certain that these ideals can be engendered and that ideals do function. We know that abundant literature, current and more remote, can be found to promote this particular ideal. The Sunday-school and the churches have no such educative opportunity as we possess with our three or four years of each graduate's time. Here we have another standard as a basis of selection, the choice of those literary forms that most affect our pupils for good, and the test is not how much they know about the author's life or style, but how much they are affected and what they do.

We cannot take time here to discuss each of the five aims from the standpoint of the selection of literature to be read in English courses and elsewhere. But we can see what an interesting and fruitful reorganization of the work would result from such a sense of relative values—from get-

ting our eyes off the outside of the cup and on those things which must be put inside the cup for the nourishment of men and women. Our young women of to-day are fortunately studying not so much china-painting and cut-glass as the relative values of foods and how to make balanced and attractive rations for people at various kinds of work. They are interested in facing well the big problems of life of whatever type rather than in the mere decorative aspects discussed by Herbert Spencer in his "What Knowledge Is of Most Worth." Art and avocations are highly important, but they must be essential parts of the daily life on the farm, not something plastered on and merely decorative.

8. *Technical Aspects.*—What shall we say of formal English grammar, the old-style technical works on rhetoric, and the spelling-book with its fifteen to twenty thousand words, formerly required of all in either the elementary or the high school or both? The principles of grammar which function enough to be worth as much to students as other changes they could make with other available subject-matter and activities are very few in number. Doctor Charters has reported the results of his studies along this line, and Hoyt, Briggs, and the writer have tested results of the teaching of formal grammar. The few most valuable phases of the science, which function more in meeting our problems than anything else, we shall keep and use, but no more. Perhaps even less of the old science of rhetoric will be kept, and then not as a science apart, pure, abstract, and logical (like the mathematics to which the old mathematician aspired), but in direct usable relationship to problems of expression and interpretation. These subjects will certainly not be studied because they are assumed to "discipline the mind," "form the will," and give a general phrenological development.

Doctor Ayres's scale for measuring spelling, with its thousand words most used and most needed by our people in their correspondence, will be utilized to help determine

minimal essentials in spelling for all. Ballou's studies of the vocabularies of students will be extended to the high school. The dictionary habit will be inculcated for that great list of occasional words required so infrequently as to free us from memorizing them all except as they come by use, thus saving us time for training of greater relative value according to our life-standards. Ballou's Harvard-Newton scale and others for measuring results in English composition will also be utilized, until superseded by better ones, in this period of rapid progress. Some study of the derivation of words, not as etymology, but as the words come up with separate lessons on principles, will be given, and obviate the need of studying Greek and Latin.

Formal dissection and extreme pedantic attention to literary trivialities of style will give way when the teacher gets her eyes on what she wants to do and starts to do it. "The devil finds work for idle hands to do." And many of our able high-school students who have read widely of the best literature at home have regarded the teacher of English in her dissection and perfunctory theme-assigning laboratory in about as favorable light as that suggested. There will be much reading and a minimum of style analysis. We are not producing critics and authors. Students are to be fitted for a different life and for facing a great common host of clearly foreseen problems. The methods outlined above will, however, prove a better preparation for those who would essay authorship. The mere critic is barren; the real author is filled with life everlasting.

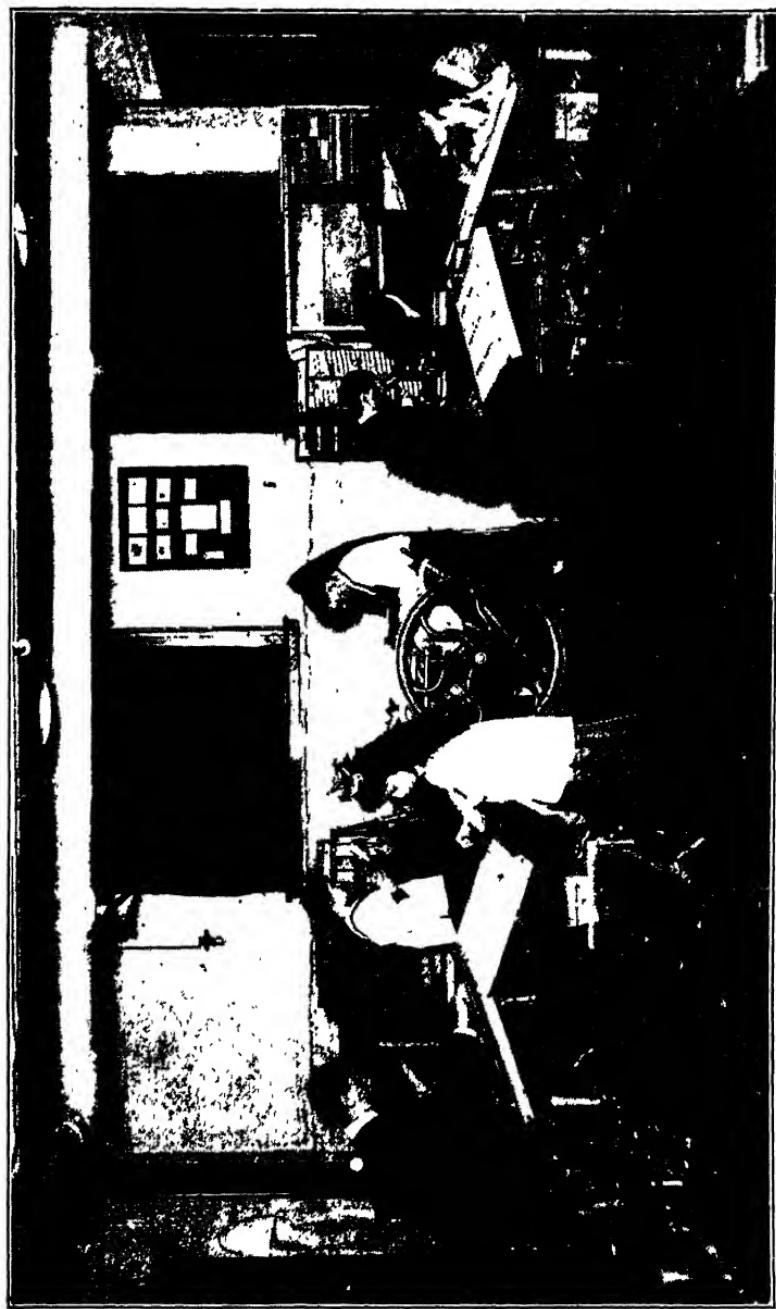
9. *Expression and Methods.*—Now what shall we say of relative values in expression and in methods of teaching? Much has already been indicated, and the process of determining what knowledge, habits, ideals, and appreciations are of most worth to the American people which the teacher of English may well undertake to develop without conflicting with, but supplementing, the work of other teachers has already been suggested. Since most of our expression

in life beyond and in the school is oral expression, we should develop ability especially along this line. Since democracy progresses by the self-organized group work of citizens meeting in assembly and since community organization and co-operation fostered by public discussion is an emergency need of the rural population to-day, as suggested in preceding sociological chapters of this volume, ability in public speaking, before a real audience, the "audience situation and audience motive," will be cultivated with particular care. English teachers have burdened themselves unnecessarily with re-inking written themes. A greater proportion of time may well be given to oral expression, to providing something to say and a good excuse for saying it. Further, all teachers will be supervised and held responsible for cultivating good expression in all classes. Since most of the writing done by most people is in letters, motivated correspondence will be emphasized far more than at present. In fact, is not letter-writing the first minimal essential of written composition?

Next, themes may well be written on topics related to the five aims of education as set forth above, not forgetting the leisure side of life to which the English work, if directed at all, has been in the past too much directed. "How We Girls Organized and Carried On Successfully a Food Sale to Raise Money for the Boys' Football Suits," for example, deals with community co-operation of a vitally important sort. Papers written for the teachers of other subjects will be sent to the English teacher, often as substitutes for her own "themes."

IV. EMANCIPATION AND EXPERIMENTATION

The Outcome in Socialized English.—We need not offer further suggestions. Needless to say, evolution is rapid now in the direction indicated in this chapter. We are bound in the direction of a socialized education, and, in the



A small printing outfit is a great help in English and in community spirit

country, a ruralized education. If what has been said helps to emphasize this social aim of education in the selection and use of subject-matter in English in the country and rural village, helps to free the teacher somewhat from the college classics, promotes intelligent interest in rural-community problems as the guiding stars of teaching, and helps to keep the gaze of the English teacher away from the outside of the cup, more than could well be hoped for will be accomplished.

PROBLEMS IN APPLICATION

1. What recommendations for the course in English is offered in the government bulletin on "Reorganization of English in Secondary Schools"? (Report of the Commission on Secondary Education, James F. Hoscic, Secretary, Government Printing Office, Washington.)
2. What applications are made in this report to the rural-school needs?
3. What additional modifications for a rural high school of six years would be desirable?
4. Make a list of suitable subjects for debates in a consolidated rural high school.
5. Do you know of any book on English for the rural high or elementary school? What does the dearth of such books indicate with respect to the close adaptation of rural schools to rural-life needs?
6. Where would you find a list of good books from which to choose the beginnings of a consolidated-school library?

BIBLIOGRAPHY

1. "Reorganization of English in Secondary Schools." Government Printing Office.
2. Bobbitt—"The Curriculum." Houghton Mifflin Co.
3. *The English Journal*, Chicago.

CHAPTER XVII

LEARNING PROCESSES OF COUNTRY CHILDREN

PRELIMINARY PROBLEMS

1. Which is more important for the teacher, a study of what is best to teach in a given community or a study of how to teach whatever is provided by text-books and courses of study? Why?
2. What do rural boys and girls commonly know on entering school?
3. What are they able to do? That is, what skills and habits have they?
4. What is the character of their ideals, following the list quoted from Bagley in the previous chapter?
5. How have they gained these types of knowledge, habits, and ideals?
6. At what age are country youth with only home education able to take fairly complete responsibility for a farm?
7. Can this concreteness of motivated learning through actual participation under sympathetic guidance be continued in the school, or must the school be predominantly abstract and remote from daily life? Suggest more vital methods of learning.

I. LEARNING AND EDUCATION¹

The Problem of the Learning Process.—After considering the nature and demands of present-day American society upon the public rural school as a supplemental public institution, the type of buildings, and the curriculum, one must study the nature of the children in whom educative changes must be made. We cannot hope for great success in achieving the purposes of democracy's rural schools if we are ignorant of the methods of change and development in immature mankind—the most delicate and highly complex

¹ A preceding discussion of "The Educative Process" has appeared in the writer's volume on "Teaching Elementary-School Subjects" (Scribners).

living material in the world.¹ A group of novices in painting may satisfactorily keep before them the ideal and model of the desired finished product, but their efforts, no matter how well-intentioned, will result in mere daubs, and waste of canvas, time, and supplies, if they do not know how to use their materials skilfully to achieve their purposes. The plant and curriculum are necessary, method is essential.

The waste of the most precious possibilities, in the form of children sent by compulsory laws for a number of years to our country schools, caused by teachers who have neither definite knowledge of rural social conditions and social needs nor of child nature and children's needs, is to-day stupendous and inimical to the progress of civilization in our land. Heredity, of course, plays an important part in determining the general trend and outcome of development in children, but the modifying influences of an educative environment yet remain incalculable.

Our first great function as teachers, after learning rural social needs and the subject-matter and school plants necessary, is to discover as soon as possible the nature and technique of the learning and development process, the nature of mental and physical growth in children.² In view of the present world-wide evil results of miseducation abroad and at home, we can view the need of more accurate and wide-spread knowledge of human development as nothing less than a social emergency. The future belongs to the nation, or part of a nation, that has the thoroughly socialized and efficient schools.

Fortunately, we have to-day for the scientific study of the learning and development process in children a thousand-fold more agencies than were but a few years ago at work. A higher professional spirit begins to animate teachers; the influence of such leaders as Thorndike, Dewey, Montessori, and others, who hold up the ideal of teachers as researchers in methods of child growth, is at work; the former child-study movement has been transformed into a host of organ-

ized agencies for more scientific inquiry into child nature and child needs,⁴ investigations and experiments by a number of individuals have been made of methods of tuition of individual children who early have become especially able along social lines ("geniuses"), and even more studies have been made of the education of backward and feeble-minded children; a great awakening is imminent in the home education of children, and we may yet expect to find parents who can add much to our recorded knowledge of the best ways of guiding the fluid life of children in the best directions. *Every teacher a natural and a trained student of the learning process in children* is a most desirable motto for our profession: To-day every thorough examination of large numbers of children, such as the simple Courtis tests in arithmetic and other subjects or the Terman intelligence tests, for example, plumbs deeper the depths of our ignorance of how children actually are changed toward increased social efficiency. The most hopeful outcome of the remarkable and successful movement for measuring results of teaching and of learning is the increased knowledge of how various results worth obtaining are to be achieved. "The psychology of a ten-year-old boy," says Professor Thorndike, "would probably involve as much subject-matter for investigation as the astronomy of the solar system or the geology of a continent."

II. THE PHYSICAL BASIS

The Physical Basis of Learning.—The modifiable changes which take place in individuals are both physical and mental, but it has been the mental side of the process which has hitherto almost obsessed the schools. The most characteristic and striking phase of development which actually goes on in children is physical in character, and fundamentally this growth and development of the body in health, grace, skill, and vigor is more important to the individual child and to the attainment of social ends than the added

psychological development. Both are necessary and should be developed together, mental activity ensuing naturally in purposive action, but we must always insure the minimum bodily essentials which make the sound mind possible.

On the physical side we are but beginning to obtain facts regarding the actual health and development conditions of American children and how these conditions are correlated with school progress and methods of mental development. Only a dozen years or so ago such facts were not available. Recent studies indicate that our homes are relatively inefficient in caring for the children in that they lose in the first year of life, largely by preventable death, about one-sixth to one-tenth of all persons born, and that before the kindergarten period or first grade of school age they lose from one-fourth to one-sixth of all those who have entered their midst. Of the eighty or more out of a hundred who manage to pass safely through the first two or three years of life, many are in fair physical condition, but soon thereafter deterioration sets in, and by the time children enter school more than half in any one school year will be found seriously in need of medical, dental, or psychological care. The Great War has shown that the health status of our people is very low. Hoag and others have found that these losses and deteriorations are due principally to profound ignorance on the part of parents with respect to the feeding, clothing, regimen, and general upbringing of their offspring.¹

A very large proportion of the children who finally enter our schools each year are in very poor condition for engaging vigorously and successfully in the learning process. Other investigations indicate that in any one school year about one-third of the children of our elementary schools will be found relatively free from serious ailments and defects, about one-third will be found suffering from dental defects only, and a final third will be found suffering from dental

¹ See Rapeer, "Educational Hygiene," chapter on The Home Hygiene of Children, and "School Health Administration," chap. II.

defects also and from other ailments of a serious character.¹ Unless the schools have thorough medical supervision, including regular inspection and examination, follow-up work by nurses and teachers, school clinics, open-air schools, and so on, the elementary teacher of any grade may thus expect to find a large proportion of her class each term seriously lacking in the physical basis of learning.

A growing number of carefully controlled investigations witness to the fact that there is a close relationship between physical efficiency, the health foundation, and mental and moral efficiency. A large share of non-promotion, retardation, and elimination from school (probably at least one-sixth of each) are due directly and indirectly to these bad preventable health conditions of children.

Prevention and Cure.—That teachers and the schools can do much in many ways to ameliorate such obstructions to learning without loss, and with measurable increase, of school efficiency has been amply proved in many places. As the official representative of the state and of the home in the scientific care of future citizens, teachers thus have as great a responsibility for ministering to the children from the standpoint of health and school efficiency as from the intellectual and moral standpoints.¹ That teachers have not recognized such conditions in the past and have done little to ameliorate them except in sporadic instances is, however, not seriously to their discredit. The facts have been but recently ascertained on a large scale; the normal and other professional training-schools for teachers have been giving little or no preparation along school-health lines; and the public has until recently made but few insistent demands of this character.

To-day, before they enter and while in service, teachers are equipping themselves in increasing numbers for this fundamental service, not only to increase their teaching efficiency but to help the community to meet one of the

¹ Rapeer, "School Health Administration."

most serious problems of life—one of the five large aims of the educative process.¹ They do this new work, moreover, not merely from their instinctive and sympathetic love of little children, but as state officials engaged in a public sociological work, holding as its motto Emerson's truth that "Health is the first Wealth." Of the motor basis of learning, of growth in muscular efficiency, and of the general educational movement to follow nature by making school life less sedentary and bookish and more free and physical, as in the Gary and other experimental schools, we have treated under the following heading, and in other volumes. The time has come for constructing *physical scales* with which to measure the health and development of pupils and for determining the *minimal essentials* of physical education.²

Administratively, there is need of a director of educational hygiene in each county who should probably perform also the duties of county health officer. His assistants would be nurses and one or more physical-training supervisors. We provide both a health-supervision room for the use of nurses, doctor, and teachers, and a gymnasium, as well as emergency retiring-rooms, in the plans of a model consolidated school given in the final chapter.

III. PRINCIPLES OF LEARNING

Fundamental Principles of Learning.—Some of the fundamental principles which control our guidance of the learning process to-day are as follows: 1. The mind is fundamentally the activity of a *connecting organism* between stimuli, or situations, largely without the nervous system, on

¹ The elements of social efficiency, namely: vital, vocational, avocational, civic, and moral efficiency. Vital efficiency includes health, physical development, etc., through the following five types of effort: medical supervision, school sanitation, physical education, teaching hygiene, and hygienic methods.

² See writer's report on "Minimal Essentials of Physical Education and a Scale for Measuring Physical Education" (Public-School Publishing Co., Bloomington, Ill.).

the one hand, and with the muscles, on the other. That is, mental activity is for the purpose of adjusting the individual to his environment, and the learning process is fundamentally one of making, preventing, and controlling the development of our motor responses to environmental stimuli, the life situations about us. Simply illustrated, an example of the mind as such a means of connection would be the tipping of a man's hat to a woman. Here, a connection has been made through the nervous system, and especially at the synapses or points of connection between nerve-cells with their extensions, giving the man the sight of a woman whom he knows, with the muscular response of tipping the hat. Ability to control and inhibit this response on seeing a woman would come under the same principle. One would not do this instinctively; it has been learned by the man at some time, and has been drilled, or practised, until it has become habit.

Instincts are also such nervous connections, inherited, and thus unlearned. But these may be modified and redirected. A child's natural inclination, or inherited mental connections, lead him, for example, to snatch candy from a box before him and get it all for himself, but he may learn to modify this connection, or the response to it, by learning to pass the box first to others before he takes from it a reasonable portion for himself. Other examples would be the certain recall of the correct spelling of the word *receive* when one is writing a letter, or responding with the answer, *ninety-two cents*, when one is purchasing two pounds of meat at forty-six cents a pound. We know that throughout life individuals are confronting situations real or imagined in school or out, and we know also that the manner in which they respond to these situations, efficiently and socially or not, is determined by the kind of connections which already exist, or can be made on the spot through thinking, by the individual in question. Teachers must study the situations in which they place children or which

the latter are meeting outside the school, or will meet later in life, and they must study the responses in conduct which they and society wish to secure if they are to be successful in making the right nervous connections.

Thorndike on "Educational Achievement"

From this point of view educational achievement consists, not in strengthening mystical general powers of the mind, but in establishing connections, binding appropriate responses to life's situations, "training the pupils to behavior" ("behavior" being the name we use for "every possible sort of reaction on the circumstances into which he may find himself brought"), building up a hierarchy or habits, strengthening and weakening bonds whereby one thing leads to another in a man's life.

The first suggestion resulting is the obvious and simple but profitable one that nothing is achieved by schools unless some connection is influenced, that we cannot assume change in any pupil unless bonds have been made or broken so as to cause him to respond as he did not before. The connection may be one leading only to an attitude, say of interest or enjoyment. It may be only partly made, guaranteeing the possibility of a certain response, not its surety. It may be hidden, showing itself only indirectly, or only after years, or in some subtle modification of intellect or character. It may lead from some elusive element or feature of a situation, such as the "place-value" of a number or the subjunctiveness of a subjunctive, to some general element or feature of many responses, such as open-mindedness or cheerfulness, or readiness to do what one accepts as right. But if anything is achieved, some actual connection or bond has been made, strengthened, weakened, or broken. A child's mind is never a witch's pot to be set in action by educational incantations. Its defects are not curable by faith. To discipline it means to improve its specific habits. To develop it means to add bonds productive of desirable responses and to awaken their opposites. Learning is connecting. It never becomes so spiritual, so general, or so involved as to evade expression in terms of concrete couplings between real happenings to a man and real responses by him. Of any educational achievement that does evade such expression we should be suspicious. Probably its only existence is in our hopes and fears.

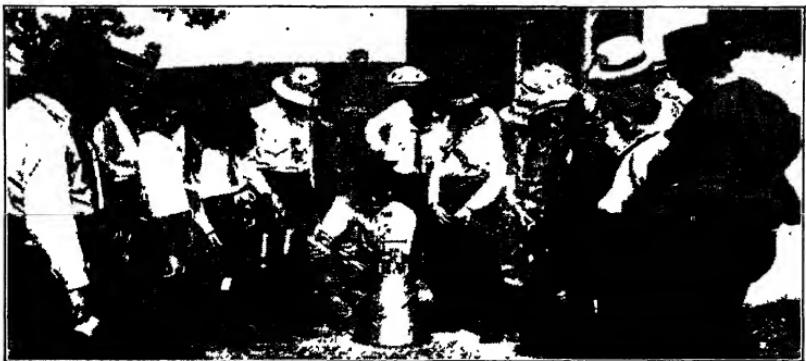
¹The teachers, then, must know just *what* mental connections will insure the conduct that will promote the ends

of education, such as health, economic and domestic efficiency, citizenship, etc. She must also study the *order* of connections to be made so that one will lead naturally into the other.¹ In the article quoted above, Thorndike shows how many of our arithmetic texts and other books fail to consider the actual life situations of children and the bonds which they should make, and also fail to consider the order in which one should follow the other. Texts in arithmetic, for example, require a reading knowledge beyond the attainments of the children in reading, and require a vocabulary which should not be made a part of the child's connections at the time. Four first books in arithmetic examined showed, in the first fifty pages, for example, at least four hundred words for which children were not prepared and for which they probably should not be prepared. In his own set of arithmetics he has tried to make essential the kinds of connections which will fit in best with school life and the many practical situations to be met by all. Nearing and Field's "Community Civics" is another illustration of producing connection in the minds and bodies of children that are directly related to rural civic efficiency. Not only must a proper selection of mental connections be made, but the proper correlation and organization of the learning process must follow. Education is becoming specific and practical in the best sense. This is made clearer in later sections.

1. *Individual Differences*.—While children are sufficiently alike to be considered a single species, yet mentally and physically they are extremely variable in most characteristics. The individual differences in children were largely overlooked in the schemes of education, or schooling, by large classes or groups devised by Lancaster, Bell, and others, in contrast with earlier methods of teaching which were almost purely individual, one pupil at a time. But mass instruction has, through its cheapness, led to the universal and compulsory elementary school with its close to twenty million pupils and but a half million teachers, an



Pig-club work in Pennsylvania



Studying a milking-machine



A lesson on the horse

Coming in touch with real problems of life

average of nearly forty to the teacher. Now that the public has been led to feel the prime necessity of thoroughgoing schooling for all, it is time that we regain some of the advantages of recognizing the infinite variety of traits in individuals, instead of attempting to teach whole groups as one person. In many ways we are discovering more fully the extent and variety of these individual differences and the ways of combining the advantages of individual and group methods of instruction. The scientific knowledge relating to individual differences is of quite recent growth and has come mainly from psychological and pedagogical investigations. Thorndike's small volume on "Individuality" may well be read by all teachers.

One of the illustrations of scientific measurement in our volume on "Teaching Elementary-School Subjects" clearly shows how the individual difference in ability to solve simple examples in arithmetic of pupils in the fourth and eighth grades widely overlap, *i. e.*, pupils in the fourth grade do as well as many in the eighth grade in these fundamentals.¹ If we test, or measure, pupils in nearly any ability or characteristic the range of variation will be found immense. These differences are, moreover, highly specialized. A child may be very quick and accurate in multiplication, for example, and be poor in subtraction.

In recent years much attention has been paid to subnormal and "exceptional" children who are able to do little in the average class at school, and we have special schools or rooms for the mentally defective, the incorrigible, the pretuberculous and anæmic, the crippled, the blind, the deaf, the defective in speech, and others. Attention is at last being focussed upon the necessity of giving superior children advantages commensurate with their exceptional abilities instead of having them drag along in what has derisively been termed the "lock-step" of class or mass instruction. "Genius will out" is but half a truth. Genius can

¹"Teaching Elementary-School Subjects," chap. XXIII (Scribners).

be "born to blush unseen" or be stultified by what Welton calls an "education in stupidity," in which the guidance of the learning process is so little individualized as to be of little value to many of a class. The ideal is to combine the social and economic advantages of class instruction with teaching that will make it possible for each individual to develop as nearly as possible at his normal or maximum rate along the lines in which he most needs development. This need furnishes one of the chief arguments for placing children of the seventh, eighth, and ninth grades in so-called junior high schools, intermediate schools, or regular high schools with five or six year courses.¹ Greater possibilities for individualizing instruction are undoubtedly thus provided. Courtis has shown that thirteen per cent of the time devoted to arithmetic could be otherwise utilized by excusing pupils from further drill who had reached a reasonable standard in class work.

Teachers must not let the fact that they have classes to teach stand in the way of providing in all possible ways for individualizing the development of the children and meeting the varying needs of each and all within the class organization. The successes mentioned above which many persons, largely unversed in educational psychology and principles of teaching, such as the father of Karl Witte, have achieved in training very young children along many lines so that at an early age they are as far along, seemingly with little or no loss, as most children twice as old, suggest many possibilities of educational progress through individualizing our teaching and helping each to grow in the way he as an individual should—as rapidly and as economically as he can. The advantages of permitting children up to the age of twelve or so to grow almost as young colts in a field, as little animals, as Rousseau advocated, may well be combined with the necessities and advantages of helping children

¹ See "A Core Curriculum for High Schools," by the writer, in *School and Society* for May 12, 1917, and the preceding chapter on the curriculum.

quickly and easily along their way into the mysteries of the complex civilization in which they must so early play an active part. In practice, we have many interesting experiments started in the public schools, as described in Dewey's volumes entitled "The Schools of To-Morrow" and "New Schools for Old" (Duttons) and recent government reports such as organizing the school-day into three parts, play, manual work, and regular studies, with much freedom and individual guidance, dividing classes into slow, medium, and fast sections, each going at its optimum rate, excusing certain pupils from recitation and providing for them special supplementary assignments, the Batavia system with two teachers to the room, or with supervised study where a fourth to a half of a class period is devoted to directing the study of pupils, division of the sexes in upper grades for certain work, departmental work in upper or all grades, each teacher teaching but one or a few subjects to pupils of several grades, school credit for home work, dividing subject-matter into minimal essentials for all and optional work for some, and many others. The great mental, physical, and social differences must be taken into account in any study or guidance of the learning process. Perhaps the outcome in the country will be consolidated schools containing high schools as in the Gary plan, with much motor work and play and academic work correlated with these, and departmental work in all or most grades from kindergarten through high school.

2. *Instinctive or Inherited Mental Connections.*—There are two chief classes of mental connections, inherited and acquired. The former are for the most part instincts, and the latter are for the most part habits. The tendency to perform a certain act or system of acts under the stimulus of a certain situation, without learning to do so, may stand as an explanation of instinctive behavior. Here nature is the schoolmistress and makes the mental connection between the stimulus and the act without the drilling of the school

or home. Were we living a simple, savage existence, such instinctive connections would largely suffice, for most of the needs of life would be satisfied without the intervention of the learning process. We should hardly need to be taught to get our food and shelter, to play and become strong, healthy, and joyous, to protect ourselves, to mate and care for our offspring, in short, to meet most of the fundamental needs of life as do the animals, because we are built that way. This original nature of man, which Kirkpatrick and Thorndike have in their books analyzed and described for teachers, has been found to be a tremendously rich and varied endowment of natural resources which civilized man must utilize in creating the superman.

Were the child to be deprived of these inherited, instinctive connections by some nervous paralysis, he would lie inactive and uninterested in anything—a piece of clay inanimate. As a city depending entirely on electricity lies cold and dark after a storm in which the lightning has blown out the fuse connections in every house, so even more completely, without the inherited synapse connections which make the lines of communication between sense organs and muscles, is the individual without the light of life. A child that will not or cannot eat, talk, walk, play, or respond by manifold mental and physical activity to the life stimuli about him is cut off from the possibility of becoming a human personality; he cannot learn.

There have been two principal extreme points of view with respect to the educative treatment of instincts: first, that the original nature of human beings is inherently bad and depraved; and, second, that it is inherently ideal and good. Under the old theory, discipline and ascetic rooting out of natural tendencies was the way of teaching. "Go and see what Johnnie is doing and tell him to don't" and "Find out what people naturally desire to do and then help them to root out these desires" are types of the old injunctions. "Make little men and women of children and

force them by military driving into the desired type of adults" has resulted in national systems of education based on this policy. "Formal discipline of the mental faculties" and complete suppression of individuality in pupils (and teachers) have been fallacious results of the doctrine. A world war has been fought between those holding to the two opposing methods.

At the other end of the scale have been the child "nature fakirs," idealizing the primitive savage, "soft pedagogy," and the freedom of children to the extent of permitting them to follow every whim of uncontrolled fancy. Rousseau was the leader of this group. Wordsworth, also, in his "Intimations of Immorality," expresses something of the same attitude toward the infant in the lines

"But trailing clouds of glory do we come
From God, who is our home:
Heaven lies about us in our infancy!
Shades of the prison-house begin to close
Upon the growing boy. * * *
At length the man perceives it die away,
And fade into the light of common day."

The common sense of most people is sufficient to guard against both extremes, although both have had their vogue and are now discernible in many homes and schools. The truth in each extreme has been well sifted from the untruth in each by Dewey in his little volume on "Interest and Effort in Education" and in his "Democracy and Education" (chap. X), and Thorndike has well expressed the modern point of view as follows:

Such problems as these in mental mechanics—problems in choosing, ordering, and manipulating the mind's connections—are now the growing point of experimental education. By skilful analysis of human learning into the millions of elementary connections between situation and response which constitute it and by experimental study of the ways in which these connections are best formed, preserved,

organized, and used, the psychologist hopes to get both comprehension and control of the foundations of educational achievement.

The foundations of educational achievement are these connections or bonds or habits of response, but these habits themselves lead us back farther to the unlearned, original capacities and tendencies of man. Human beings, as you well know, are not indifferent clay to be moulded at will by the teacher's art. They are themselves active forces to help or hinder. They inherit as a human birthright instincts and interests of which education from the start and throughout must take account. Educational achievement is small or great in proportion as it neglects these natural, untaught tendencies in man, or utilizes them to further his ideal aims. And educational science needs as its basal equipment an exact and adequate inventory of the original nature of man as a species and of the idiosyncrasies of individual man.

No choice of habits of thought or action to be formed by schools is sound which gives technic irrespective of needs felt by the pupil, or adds knowledge without any motive for its use, or tries to cultivate artificial virtues in disregard of the crude forms of courage, kindliness, zeal, and helpfulness which nature already affords.

No arrangement of the mind's connections is economical which fails to use the inborn organizing power of curiosity, the problem attitude, and the desire to test and verify or refute by eyes and hands.

No manipulation of bonds in learning is efficient which disregards the pupil's own sense of sociability, kindness, and achievement during the learning process. The original proclivities of the human animal are as real as its laws of learning and condition these throughout. Every habit is formed in the service of some instinctive interest.

The inborn interest of man in movement, novelty, color, life, the behavior of other human beings, sociability, cheerfulness, notice, approval, mastery, and self-activity, are not ultimate aims of education, nor is their presence a guarantee that school work is well directed and efficient. But we double achievement if we get them on our side and we enrich life enormously at little cost if we turn these fundamental passions into line with higher nature and the common good.

I hold no brief in favor of avoiding in schools anything necessary for human welfare, either because it is hard or because it is disliked. I find many of the tendencies born in man to be archaic, useless, immoral, adapted to such a life as man lived in the woods a hundred thousand years ago, when affection had not spread beyond the family, or justice beyond the tribe, or science beyond the needs of to-morrow, and when truth was only the undisputed, and goodness only the unrebuted. That the natural is the good is a superstition which psychology cannot tolerate. Still less, however, can psychology tolerate

the superstition that there can be any other foundation for educational achievement other than the best that human nature itself affords. Truth is only what the best in human nature accepts; goodness is only what the best human nature craves. We mean by the rational, ideal, and impersonal aims of education, only the nobler inborn human interests purified of their crude accompaniments and broadened to harmonize with the common good. We must not find too much fault with human nature; for ultimately it is all we have. Its best elements are the best the world has or ever will have.

In short, the various instinctive tendencies of children to respond in various ways to life situations are to be studied and utilized, guided and directed toward social efficiency, as natural resources, like a great gorge of running water which can be controlled and guided into turning the wheels of industry, lighting towns miles away, and irrigating vast stretches of waste land. The playground movement, for example, which, since 1907, has spread over this country like fire in prairie-grass, has released millions of horse-powers of energy in children, which previously would have been largely misdirected and wasted, and has diverted them into the most educative activities contributing to health, grace, ability, knowledge and training in getting along well with one's fellows, leadership, practical morals, right use of leisure, constructive and manual-training activities—affecting directly in some measure most or all of the ends of education. As Bagley says:

The task of education with reference to the instincts is three-fold: (1) Certain instinctive controls must be "*sublimated*"; that is, the energy that they release must be directed to ends other than those indicated by the primitive instincts themselves. The few but troublesome unsocial or antisocial impulses are in this class—the impulse to appropriate what pleases one; the impulse to inflict bodily injury upon those against whom the feeling of resentment has been aroused; the impulse to follow the strongest external stimulus regardless of its remote bearing upon the remote ends that one seeks to attain; the impulse to seek change and variety; and, in the ever-lengthening period that elapses between physiological and economic maturity, the imperious sex and parental instincts.

(2) In the second place, certain instincts must be *confirmed* and given the sanction of repeated experience. Chief among these are the comparatively weak instincts of co-operation and sacrifice.

(3) Finally, certain instincts form the basis of *incentives* or natural interests which may be directed toward the acquisition of controls that may be quite unrelated to the instincts employed as means. Among these are the instinct of emulation, the "property" instinct, and especially the adaptive instincts—play, curiosity, imitation, and repetition.

The chief warning which teachers must regard in utilizing instincts is probably along the line of the place of interest in teaching. Dewey, the great modern exponent of education by natural development, warns teachers again and again to avoid the pitfalls of divorcing interest and effort by making the work of education so soft and easy as to encourage mental laziness, physical flabbiness, and inability to do anything that needs to be done if it does not strongly appeal to the child as temporarily interesting. The danger lies in encouraging the attitude which waits for work that attracts, and discourages the appropriate and only rational attitude toward work—namely, putting forth the effort to *make the work attractive*. It makes one the slave of one's desires and enthusiasms rather than their *master*. Teachers should read also the chapter on Discipline and the Doctrine of Interest in his volume on "School Discipline," by Professor Bagley, who is the chief exponent in this country of the "Gospel of Work" in education.

"*Motivation of School Work*" has been a popular cry in many schools in the last few years. Children have a right to live as naturally now as they will when they grow up—to understand why they do this and that, and to have some legitimate desire which they themselves feel as a prompting to the work. Teachers have gained excellent results with delight to the children by this method. Instead of reading aloud with no one to learn or to get thought from the reading, no audience situation, children are taught to face the class and read to them—they with their books

closed. More naturally still, the child reads matter unknown and interesting to his class in such a way as to furnish them delight. The children write, not so many pages on duty, patience, etc., as in days gone by, but real letters to children absent from school or others in schools far away, to the school directors words of appreciation for improving their playground by apparatus, trees, or grading, and so on.¹ The play and competitive instincts are used to provide motives for participating vigorously in the drill of arithmetic and spelling by holding ciphering and spelling matches. In the Gary, the Fairhope, the Speyer, the Francis Parker, and other such schools described by Dewey in his "Schools of To-Morrow," children learn important lessons closely related to the great aims of education by natural constructive activities in the shops, laboratories, on the playgrounds, on excursions, and everywhere. Those newer rural-school movements which base the learning process more fundamentally on the natural instincts of childhood are showing us that the gospel of interest and happiness can be lived along with the gospel of work and duty. Interest and effort can be harmonized. The child can learn to do by doing. Thus the farm at the school and home project work, agricultural, domestic, and closely related training, fit our modern theories of child psychology and hygiene.

4. *Self-Activity*.—A fourth great principle of the learning process is that of self-activity. The learning process is, when operating at all, one of self-activity. "Teaching is but providing situations for educative self-activity," said Francis Parker. "You may lead a horse to water but you can't make it drink" and "learning by doing" are old sayings. The Bible says: "Ye must be doers of the deed if ye would understand the doctrine." Unless we get the right responses from children, our incentives, stimuli, or

¹ Wilson's "Motivation of School Work," chaps. V and VI. Isn't the minimal essential of composition the art of *letter-writing*? What else do most people write in this world?

situations are not educative. "Students are educated by their own mental responses, not by the stimuli or influences provided by the teacher. The latter are influential in determining the individual's character only through the responses they arouse," says Professor Chester Parker. Children can learn both by direct and by communicated experience, more from the former than the latter, but the test is always the actual experience and the reaction to it. Since the time of Rousseau and Froebel and especially since modern educational psychology has begun contributing to educational science, in the last few years, the importance of this law of self-activity has gradually been increasing. Children learn to *appear* attentive, docile, and engaging in the learning process when their minds are "o'er the hills and far away." Day-dreaming and mental laziness are fostered by methods that do not provide for energetic self-activity on the part of the pupils. The ideal is to get children as happily, energetically, and persistently engaged at the most educative activity for them all the time in the school as they engage in their games of baseball, marbles, and hide-and-seek outside. Too often our methods foster the sitting-on-the-bleachers-while-the-game-goes-on habit. We must get educative activity that is really educative and that is adapted to the age and needs of the individual pupils and community and then get all into this activity all the time, whether it be making a chair or repairing a shoe in manual training, solving real problems in arithmetic, engaging in play and co-operative group games on the playground, or simply lying at rest on the reclining chairs or mats of the open-air school, or in the ordinary seats of the classroom. A hundred-per-cent teacher is one who can get all pupils thus engaged all the time. A thirty-per-cent teacher is one who can get all thus engaged thirty per cent of the time. Mere self-activity, however, is not the aim, although this seems to be the only aim of much of the so-called busy work. "Nothing is so terrible as activity without method." The most

useful, educative self-activity guided by social purpose is our goal.

5. *Habit-Building*.—The learning process consists principally of the formation of habits. The millions of habits which should be formed by teaching can be named and classified as Bagley has listed and classified the ideals which should be made a part of each child's make-up in varying propositions according to his needs. The home has a very large part to play in this process from the earliest weeks of the child's life in creating the habits of feeding, sleeping, and playing at regular hours, such habits as the "knife-hand," the "fork-hand," the "spoon-hand," and the hundreds of other habits of the table, for example, the thousands of habits in the use of language, the habits connected with putting on and taking off clothing, and the habits of behavior in the house for providing the greatest satisfaction to the individual and least injury and greatest good to the other members of the home. Each one of these is a mental connection or system of connections between a situation and a form of behavior which is, through the learning process, established in the nervous system. James and other psychologists have said that 999/1000 of our daily activity is made up of habits, and this is literally true.

A process is educative while it is being learned, *i. e.*, being made habit. When habit breaks down or we find we have no habits to fit the new and strange situation, then thinking, with its active attention, arises to build the new connection systems. When we describe the ideal man or woman we tell what this individual habitually does in various given situations. A great law of learning habits is that of vigorous attentive repetition. Fortunately, children have an instinct for repetition which helps them to take great pleasure in repeating many acts until they have been made established mental connections, or habits. A child will fill a cup with sand and pour it out again by the half-hour, or will similarly button and unbutton its shoes,

or do anything, practically, which instinct or acquired interest leads it to do until the act has been fairly well or completely learned. Pupils need skilful guidance, however, in getting them to go through the drill for which they do not have such instinctive promptings, such as the forty-five addition and forty-five multiplication facts, for example, or the habit of washing their hands before coming to the table. Here is where motivation and real-life situations play their part in stimulating the necessary repetition and attention. Usually the principles of habituation are given as focalization, repetition, permitting no exceptions, and providing for long-continued use of the needed activity. They will be discussed and applied in the following chapter.

Formal discipline is a doctrine closely related to the habit-forming process which has had a great and largely injurious effect upon education. The thought has been that if one drills himself in one line of activity he will develop a general power of this type, *i. e.*, if one drills himself in reasoning out the answers to puzzles and algebraic problems, that he thereby gains more than the ability to solve such puzzles and such problems, that he gains a general power of reasoning in all fields and with any material. "If he persistently works hard at the drudgery of formal grammar he will gain the power to work hard at any line of work." "If he memorizes all the words in the spelling-book, regardless of his need for ability to spell them all or a twentieth of them in letter-writing, he will by this exercise strengthen his memory for any or all other things." "In the primary grades we are to develop powers of observation, perception, concentration, reasoning, and attention." These are such expressions as we have probably all heard supervisors or others say in the past.

The truth probably is that in memorizing the spelling of words we gain ability to spell the words which we memorize, and that our memory for the number of days in a month, for the facts of arithmetic, and for other matter

has not been especially helped. When we come to attack the memorization of these we go through about the same amount of memory activity as if we had not previously memorized. There is a certain identity of processes in many similar lines of mental work; and certain notions of how to do a thing and certain ideals of what to do and how to do it arise in many persons' minds in transferring from one to another; we may have "general discipline" when we have not formal discipline; we do get certain attitudes of mind, a certain readiness or unreadiness to cope with situations, a certain way of responding, and a certain character, in short.¹ But a great wrong has been done entire nations of individuals through the extreme applications of this theory. Educators and the public have thought it possible to work out certain formal mental and physical gymnastics which could be drilled into pupils in some sequestered spot, entirely apart from life and its manifold situations, and thus give general mental ability, the millions of separate habits in response to given and unique life situations which, if the individual is to gain habits fitting him for this world, can be found nowhere except in the life of the world itself. The parts of formal grammar which do not function in improving children's speech, obsolete and never-used phases of arithmetic, algebra, geometry, Latin, Greek, formal technical science, deductive logic, modern languages other than English, and many other subjects have been put in or kept in courses of study largely regardless of any direct and plain relation which they bear to any of the large aims of education, all because of the superstitious belief that these in some mysterious manner "disciplined," "trained," "cultivated" the mind, "developed the mental faculties," and "made keen the understanding."

This danger is so great that the wise teacher will limit her teaching, not merely to what is "practical" in the narrow sense of having an easily observable relation to

¹ Yocom, "Culture, Discipline, and Democracy," chaps. II and III.

bread-and-butter aims, the making of a living, but practical in the sense that the habits she cultivates have a plain and observable relation to all the great aims of education, such as health, right use of leisure, citizenship, moral efficiency, etc., with the foundation habits, carefully selected, that give one ability to communicate with one's fellows, to meet the few and simple number relations of life, to get along well socially with one's neighbors, habits of harmless enjoyment, etc. We have attempted educational systems here and abroad on false hypotheses held as dogmas and have failed in educating our publics; let us to-day analyze our life and teaching situations until we are able to say definitely that the habits we inculcate are surely needed by the child and society in definite and clearly perceived situations. We need fewer theoretical bubbles and more of scientific brass tacks in our great business of nation forming.¹ The social survey of the community and state gives us our social aims and needs; scientific study of children gives us knowledge of how to help them to form necessary life habits.

5. *Knowledge*, habits, ideals, and appreciations are four of the principal psychological factors in learning. By knowledge we usually mean all four—everything one gets by the learning process. But most habits are easily distinguished from knowledge, or information, and ideals from either. The laws for learning, or gaining knowledge (ideas, facts, information, principles), are the laws principally of memory and the simple associations of meanings or ideas with symbols. What knowledge is of most worth has been discussed in previous chapters. How the child gains knowledge, communicated or vicarious experience, is our present problem. Facts get into the mind by simple sensing, perceiving, and interpreting. The child gains the meaning

¹ The aim of education is growth in social efficiency, the factors of which are: (1) vital, (2) vocational, (3) avocational, (4) civic, and (5) moral efficiency. We repeat this in order that it may become fixed. The student should memorize the factors in the order here given.

of the word dog and the word pat by seeing and performing the action in close association with hearing the words naming the act. By repetition, the mental connection between the word and the action are made habit, here termed memory. The command, "Go, pat the dog," is similarly learned by simple mental association. Gradually, as the child grows older, this command may be so fixed by drill and by vividness, including the awakening of desire and interest or fear of punishment as incentives, that, inhibiting all calls on his attention by objects and activities along the way, he may walk some distance holding in memory the command, and at the end of the little journey pat the dog as commanded. This is connection-forming involving ideas, a higher type than the simple connections of the animal type such as that of the child learning to button his shoes.

We have not attempted to discuss all types of learning separately. Parker distinguishes five types: (1) gaining motor habits or skill, (2) associating symbols and meanings, (3) gaining power in reflective thinking, (4) gaining habits of harmless enjoyment, (5) gaining skill in expression.

The hierarchy of mental connections which can be made are given in the next article. Thorndike distinguishes four types of connection-forming in learning: first, that of the simple animal type as when a baby learns to beat a drum with no thought of the process; second, that involving ideas, as when an older child learns to think of candy on hearing the word, or to say candy on thinking the idea; third, analysis or abstraction, as when the child learns to pick out its mother's voice in the babel of sounds of a roomful of company; and fourth, selective thinking or reasoning, as when a person learns to meet a given new problem or situation by testing out various methods of solving it which occur to him.

The second and first have been discussed; the third and fourth will be treated in the following chapter. Under the

head of habit-formation and the recitation lesson we shall treat further of the type of learning in which ideas are used. The learning of ideals, attitudes, and appreciations will also be treated under topics of the teaching process. Teaching is but the supervision of the learning process, and any discussion of the one process involves discussion of the other. In his "Psychology of the Common Branches," Professor Freeman has discussed the learning process in direct connection with the elementary-school subjects. In his "How Children Learn," he has covered the ground of this chapter and more. In his volume on "The Learning Process," Professor Colvin has treated the more general aspects as has Thorndike in his "Educational Psychology." Each teacher can and must be a first-hand student of this most interesting and important process in the world. It is said that Germany spent a hundred million dollars in publicity work that changed the minds of the Russians and led to easy victory. The science of mind-building in children and adults has all the fascination of invention and discovery.

SUMMARY

1. Knowledge of the nature of children and the learning process is extremely important and rapidly increasing.
2. Learning is largely physical and it has a health and development basis.
3. The physical basis of learning has been sadly overlooked and from one-third to two-thirds of American children to-day are seriously hindered in their growth, both mental and physical, by serious ailments and defects. Teachers must learn to help discover, cure, and prevent such hindrances to the learning process.
4. The learning process is fundamentally one of adjusting oneself mentally and physically to life's needs and situations.
5. It is always a mental and physical process when at its best. We learn to meet life's needs and situations by meeting them. Guidance, reflection, and study of the situations and conditions help to economize and hasten the process.
6. The great individual differences in the nature and in the life needs of individuals must always be studied and considered.

7. Instincts, natural impulses, and interests are the natural resources of education. These inherited mental connections keep the child alive and ready to be doing things to learn. Put children in the best possible environment and help them to learn to respond to it socially.
8. Children learn best by meeting situations themselves through their own self-activity. Most teachers err in doing things for children and telling them what they think they should know. Education is a constant self-active reconstruction of experience in the direction of a socialized, cultured, efficient individual.
9. Habit and thinking are two important types of adjustment or mental connection. When habit breaks down, thinking arises.
10. The old faculty psychology has gone, but the theory of formal discipline lingers. The wise teacher learns to guide activity toward more realizable ends than a training of "the reason," "memory," will-power, concentration, imagination, etc.
11. Knowledge gained by mere memory without reference to doing something, guiding conduct, meeting a situation, is not power.

PROBLEMS IN APPLICATION

1. Make a list of the principal mistakes made in handling pupils.
2. What facts and principles of child nature and growth in social efficiency are overlooked by those making these errors?
3. Is the fact that a large proportion of boys and girls desire to "leave the farm and go to the city to live" due to poor education in the home or in the school, or is it desirable or inevitable?
4. What methods would you suggest for insuring that pupils learned how to write effective letters to mail-order houses with reasonable legibility and correctness of spelling and that they would not find letter-writing so repugnant in adult life that they would fail to make use of it when desirable for communication?
5. What great principles of method are followed in your statement of ways and means?
6. Read Strayer and Norsworthy's "How to Teach" as soon as possible in this connection. The volume is really one on child psychology and methods of learning.
7. What phases of method do farmers ordinarily stress in speaking of teaching? What ones do they usually overlook?
8. What effect has the transportation of pupils to a consolidated school on their opportunity to study?
9. Read the chapters relating to rural-school hygiene in the writer's volume on "Educational Hygiene," or the volume on "Rural

School Hygiene," as it relates to the health and physical development of country children.

10. Why is habit so important in promoting health in pupils and the community? Do the sanitary features of a consolidated school favor the development of hygienic habits? What is the relation of indoor flush-toilets at consolidated schools to the inculcation of anti-typhoid habits of cleanliness?

BIBLIOGRAPHY

1. Bachman—"Principles of Elementary Education." D. C. Heath & Co.
2. Bagley—"Educational Values." The Macmillan Co.
3. ——"School Discipline." The Macmillan Co.
4. Colvin—"The Learning Process." The Macmillan Co.
5. Colvin & Bagley—"Human Behavior." The Macmillan Co.
6. Dewey—"Democracy and Education." The Macmillan Co.
7. ——"Interest and Effort." Houghton Mifflin Co.
8. ——"The Schools of To-Morrow." E. P. Dutton & Co.
9. Freeman—"The Psychology of the Common Branches." Houghton Mifflin Co.
10. ——"How Children Learn." Houghton Mifflin Co.
11. Hoag and Terman—"Health Work in the Schools." Houghton Mifflin Co.
12. Kirkpatrick—"Fundamentals of Child Study." The Macmillan Co.
13. Klapper—"Principles of Educational Practice." D. Appleton & Co.
14. Parker—"Methods of Teaching in High Schools." Ginn & Co.
15. Rapeer—"Educational Hygiene." Chas. Scribner's Sons.
16. ——"Teaching Elementary School Subjects." Chas. Scribner's Sons.
17. Sandiford—"The Mental and Physical Life of School Children." Longmans, Green & Co.
18. Thorndike—"Foundations of Educational Achievement in 1914." Proceedings of the National Education Association and the *Educational Review* for December, 1914.
19. ——"Individuality." Houghton Mifflin Co.
20. ——"Principles of Teaching." Seiler Co.
21. ——"Original Nature of Man." Teachers College, Columbia University.
22. ——"The Psychology of Learning." Teachers College, Columbia University.

23. Wilson—"Motivation of the Elementary School Subjects." Houghton Mifflin Co.
24. Strayer and Norsworthy—"How to Teach." The Macmillan Co.
25. Vogt—"Rural Sociology." D. Appleton & Co.
26. McKeever's books on farm boys and girls.

CHAPTER XVIII

THE TEACHING PROCESS IN THE CONSOLIDATED SCHOOL

PRELIMINARY PROBLEMS

1. What advantage has the country teacher using a text like Field and Nearing's "Community Civics" (Ginn) over the teacher using the ordinary old-type texts?
2. Make a list of some of the important good points of the teaching you have observed as a pupil and student.
3. Could children be successfully taught how to invent? Can invention and originality of thinking be developed? How?
4. What are the possible advances in teaching which may be expected from such experimental schools as the Lincoln, in New York City, under the General Education Board?
5. What are some of the chief sources of waste of time in teaching?
6. What books on methods of teaching have you seen or read? Do they compare well with text-books on method for physicians and lawyers?

I. THE TEACHING SITUATION

The Child, the School, and Society.—The public-school teacher of our democracy should be thoroughly equipped with experience relating to the nature of children and to the nature of present-day American and especially rural society. He will realize that his pupils have both private and public functions, and that the work which they do in the world, whether specifically private or public, should be social service—honest and efficient contribution to the welfare of society. The principal positive and negative problems of the individual and of society will be his problems. The failure of democracy in his own community and state, as shown in the forms of poverty, disease, crime, social in-

justice, industrial inefficiency, lack of desirable leisure, appreciation, culture and avocations, etc., and the needs of individuals, community, and state in the way of positive conduct-controls that will promote the values of health, morality, and general social efficiency necessary to the promotion of universal happiness and self-realization—these he understands, is keenly responsive to, and is daily growing in efficiency to meet as a servant of the public good.

Devine has offered some valuable suggestions for improving the social function of the schools in the proceedings of the 1914 National Education Association. He shows the serious limitations under which most of us as teachers work, and how easily we become pedantic when not conversant with social needs and not continually on the alert to adapt means to social ends. It is only by the aid of more socialized teachers, curricula, and a more vital connection with social needs and conditions that we can perform the service for which we are employed. The ideal rural teacher is thoroughly conversant with rural needs and conditions by direct experience and reading, and is also acquainted with the problems of cities and the world in general. Rural sociology, economics, and civics will be a large part of his academic knowledge. The natural sciences and the social sciences directly related to rural life will displace much of his language and mathematical studies.

¹We fail also when we do not know children thoroughly, not only in a personal but in a scientific manner. Rousseau may have overstated it when he said that whenever he was in doubt as to educational procedure the teacher should study his pupils in order to learn the answer. But there is much of truth in the proposition. One may have profound insight into modern rural social conditions and problems, and the relation of his particular pupils to these problems, but unless he knows the nature of childhood and the learning process he will make a very common and lamentable failure when he proceeds to teach. The technic

of teaching stands on two legs, the nature of society and the nature of children.

The most important reform and the most fruitful development toward teaching efficiency since the time of Rousseau has been that of sympathetic and scientific child-study. The reaction against the demands of society and the resulting specializing of all emphasis on the child went too far in the direction of individualism, perhaps, but the focus of attention of several generations on the child as the centre has led to a use of both limbs of the process again in a more harmonious manner. Some of the principal facts regarding the nature of children have been sketched in the preceding chapters under such headings as instincts, habits, knowledge, ideals, etc. But along with this knowledge and constant study of a technical character on the part of the teacher go a spirit of love, of reverence, and sympathetic open-mindedness such as characterized super-teachers like Pestalozzi among his orphans in Switzerland and the Great Teacher among the fishermen of Galilee.

The factors of teaching efficiency, in the third place, are not hard-and-fast matters, and are only now being scientifically determined. The great need has been for definite social standards and goals toward which to aim, such as health, citizenship, morality, vocational ability, and avocational efficiency, and carefully derived minimal essentials, and for scientific standards and units for measuring the results obtained. When we can measure in the light of recognized social aims the work of teachers, then we can make more definite the factors of teaching skill. The methods of those who obtain superior results with a minimum of expenditure of time and energy will be studied as will those of poor teachers, and from these empirical and scientific data more helpful principles of teaching will be derived. What we have to offer now in the way of definite guides to success is not very extensive or scientific, although such books as Charter's "Methods of Teaching," and others

mentioned later, any one of which would be an excellent introduction to the study of the writer's volume dealing with the various school subjects, are approaching what is desired. Teaching is the guidance of learning. If no one has learned, no teaching has been done. If the child becomes a good learner, his teaching has probably been good.¹ Teaching is the guidance of learning, and learning is the test of teaching.

II. CLASSROOM MANAGEMENT

Good class management and sound health on the part of the pupils are fundamental requisites to good class teaching. As suggested before, the health basis, with many exceptions, is still woefully neglected in American schools. Tuberculosis and typhoid, diphtheria and scarlet fever still slay their thousands unnecessarily, while multitudinous physical defects make for serious retardation and defeat of the teacher's best efforts. Parker reports in his volume on "Methods of Teaching in High Schools," a common judgment of pupils grown up: "On no one point is there more unanimity than the want of attention to bodily health and exercise; not one (of the college students reporting) has anything favorable to say on this point, and many accuse the (high) school *in extenso* of its dereliction in physical education." One student writes: "During the first three years I do not recall a single suggestion by any teacher to get out in the open air—or anywhere else. At noon most of us stayed indoors and either strolled up and down some very dark corridors, or sat at our desks and studied. The self-ventilating heating system was then in vogue, and the teachers had orders not to open the windows, so that the rooms were stuffy, and the pupils drowsy."² Another chapter

¹Strayer and Norsworthy's "How to Teach" is a very helpful discussion of educational psychology for teachers. It treats of recent principles of educational psychology.

²From Sisson's article on "College Students' Comments on Their Own High School Training," in the *School Review* for October, 1912.

brings forward this general health basis, and suggests how some of the principal conduct-controls, especially habits, may be established that will help insure health. The general care of environment through class management also can hardly be termed teaching, and yet lies at the basis of teaching efficiency.

Discipline, order, scientific management in the more mechanical phases of classroom procedure, proper arrangement of the programme, keeping the schoolroom sanitary, and many other phases outside of teaching itself are of great importance, not at all to be lightly considered by the teacher. In business as well as in some of our best schools, many of the most profitable increases in efficiency and decreases of waste and lost motion are attained by painstaking analysis of such seeming trifles as how, with less labor and better results, to paste labels on cans, or to lay bricks with fewer motions, and in schools by investigation of such problems as the proper planning of the programme, the passing out of books, taking of records, correlating subjects, reducing tardiness and absence, seating pupils, preventing disorder, etc. Such books as Bagley's "Classroom Management" and "School Discipline" the teacher should be familiar with, and she should get from them the attitude of careful study of the practical classroom problems which are not an integral part of teaching in the narrow sense.

III. PRINCIPLES OF TEACHING

Some of the general principles of teaching now coming commonly to be accepted and supported by a growing number of scientific investigations may be summarized as follows:

1. The natural child, as Rousseau and his followers have emphasized, must, as suggested in the previous chapter, be taken into consideration. Education is a process of growth, not of accretion. The instinctive tendencies are not, however, to be merely coddled and pampered. They

are, as Dewey suggests in his "School and Society," the natural resources which stimulate the child to activity along a number of different lines, many of them leading to habitual activities of much, little, or no value at the present time. The instinct for repetition is valuable in that it makes possible a natural way of getting the training necessary to the formation of desirable habits. The instinct for physical activity and play can, with little loss of energy, be directed into types of activity that make for firmly established habits, knowledge, ideals, interests, prejudices, tastes, and attitudes that will help the individual and his fellows to make for a higher type of community well-being. The constructive interest can be guided into artistic, avocational, and industrial lines. In general, "take the power otherwise going to waste or causing damage and utilize it for educational ends" would be a first principle of method. Get pupils to want the right things by the help of instinctive interests and then help them to obtain them.

2. *Motivation*.—A corollary is the law of motivation, namely, that other things being equal, mental connections, the prime factors in education, will be more likely to be made with economy and hooked up with the life situations in which they are needed if the interest, motives, and desires of children are aroused or utilized. Dewey started his laboratory school with the intention of discovering how far the work of the school could be as naturally motivated as is the play life of children outside of the school, or as is the self-directed activity of adults at their daily activities. Thorndike shows that "the prime law in all human control is to get the man to make the desired response and to be satisfied thereby," and that satisfying results strengthen, and discomfort weakens, the bond between situation and response. The way to get the right response to a stimulus or situation is to provide motivation.

3. *Repetition* is both an instinct and a most important teaching factor in establishing habits, fixing knowledge so

it may be recalled, and furnishing the basis for attitudes and ideals. It rests on the fundamental laws of learning. Have pupils repeat the acts, principles and facts which you would have them master. See that they have a good stirring motive for the repetition. Give opportunity for the use and exercise of knowledge and skill gained, not only at or near the time of learning, but throughout the years of school life thereafter. Distribution of repetition is as important as initial repetition, because of the tendency for mental connections or modifications to be weakened or broken with time, occasioning loss of skill and forgetting. Not only drill at the time of initial learning, but frequent repetition and practical use over months and years of time are necessary.

4. *Learning With Life Situation.*—The response must be firmly connected with a specific stimulus or stimuli, such as the response thirty, when "five-times-six" is the stimulus, and this stimulus must be like that or those which should call it forth in the life of the individual. As spelling is principally used in the writing of letters, it is desirable to have much of the spelling learned and drilled in script form and in the writing of letters. We want pupils to be able not merely to spell in the classroom under given conditions or stimuli, but we want them especially to know how to spell correctly when they are seated before letter-paper and are engrossed with the thought they are trying to communicate.¹ The nearer the school situation is like the life situation, the more surely will correct spelling be the result. Tuskegee Institute is one of the best illustrations of the application of this principle. Recent changes in our rural schools have been very largely in this general direction.

5. *Attention.*—All teachers are concerned with getting and holding the attention of their pupils to the learning

¹ Judd's "Measuring the Work of the Public Schools" seems to show that for Cleveland children, at least, isolated words are spelled about as correctly as they are when used in sentences, but our thesis holds good.



Teachers learning vegetable gardening at a summer school



Giving the girls a chance at West Alexandria, Ohio

process in which they must engage. When the work is closely related to the natural tendencies of the children, as in an arithmetic game, or "ciphering match," the problem of getting all to participate with their best efforts is not so great, but with an idea or purpose which requires effort *not* lying along the path of instinctive or acquired connections, attention on the part of all is harder to get. The types of attention are three or four: passive, active, secondary passive, and, as the writer has termed it, dynamic zealous. The first is the instinctive, spontaneous type; the second is the active, voluntary type in which we must make an effort against natural or other tendencies, to hold our attention and activities to the line of our purpose; the third is the outcome of voluntary or active attention, a kind of attention which comes through the struggle of active attention, as when we learn to like composition writing, which we had disliked, after sticking to it long enough; and fourth, as an example, we should probably name the type of attention of the zealot, the genius, the person of tremendous concentration and zeal who puts emotion, enthusiasm, and dynamic energy into his line of activity. Most teachers wish they could get the baseball, football, and basket-ball teams to engage in class recitations and in study as they participate with frenzy in these games. We all know persons who are marked by the concentrated, energetic manner in which they hew to the line of their purpose regardless of how naturally distasteful the activity may be. How to rise through these levels of attention, how the child learns to attend, are problems of educational psychology and teaching, but these are the phases which must be distinguished. Discussions of interest, instinct, purpose, habituation, and the types of lessons discussed elsewhere will clarify somewhat these problems.

THE CONSOLIDATED RURAL SCHOOL

of expenditure for the education of the child equal to that for its food or clothing. In 1912 the total expenditure for all public-school purposes in the United States averaged \$5.05 per capita of the total population. This average ranged from \$1.52 in Alabama and \$1.53 in South Carolina to \$9.18 in Utah and \$9.30 in California. In that year the total expenditure for public schools was approximately \$483,000,000; but only \$285,000,000, less than 59 per cent of the whole, was for teachers' salaries. Teachers' salaries, the most important item in the lengthening of the school term, could therefore be doubled with an increase of less than 60 per cent in the total expenditures. This would give a substantial increase in the monthly salaries of teachers and at the same time lengthen the school term to an average of 180 or 200 days. Since the average for city schools is already more than 184 days, the increase possible by this increase of 60 per cent in the total expenditure might be so used as to bring the rural schools up to the full term of the city schools, even after adding both to the monthly salary of city and country teachers and to the length of the city-school term. Even if no addition were made to the monthly salary of the teacher, the larger annual salary that would come with a longer school term would increase the efficiency of the schools in other ways and especially by putting and keeping in the schools better teachers and giving them more opportunity for experience and enabling them to concentrate their energies to a greater extent on the work of the school. It is the salary for the year rather than for the month that counts. I believe no thinking man or woman with any knowledge of economic causes and conditions will deny that this increase in school funds might be made both easily and profitably. It would be easy to show where much more than this amount could be saved in public or private expenditures without injury to any useful cause.

Larger Units of Support and Control.—Per capita wealth varies sharply from section to section and from one local

miration for those who live healthily and of disgust for those who do not, general repugnance to stuffy rooms, to flies, to dirt, to the use of alcohol and tobacco, and to general uncleanliness and poor regimen.

Thorndike discusses the following seventeen phases or types of methods of teaching, about which there has been considerable discussion: Methods for drill, or habituation; methods for reasoning, or analysis; realistic versus verbal teaching; laboratory or experimental methods; inductive methods; teaching by action and dramatization; the lecture method; object-lessons and demonstrations; telling versus questioning: The Socratic method; "developing" methods; education by self-activity; the methods of discovery; teaching pupils how to study; example and precept; imperative, persuasive, and suggestive methods; evasive, suppressive, and substitutive methods; reward and punishment.

General Method.—If we were to compress in a nutshell the general method of teaching it would be, *first*, to get the child (or class) by some form of motivation to desire to do or to accomplish what is desirable for him to do or accomplish along the lines of some aim of education; *second*, to get him to get the purpose and plan of what he is attempting to do clearly in mind; *third*, to get him to engage actively and energetically in this educative activity; *fourth*, to persist in practice and drill until he has accomplished what he set out to do, *e. g.*, to make a pair of skis in manual training, or, after he has accomplished successfully his aim, to write a composition, for the benefit of another boy, on how best to make skis; and *fifth*, to verify or test his product by applying it or using it in some manner to see if it satisfies his original aim. Our knowledge of the extent of individual differences will, of course, help us to avoid the narrow formalism of putting every child in every lesson through the same steps.

"Strictly speaking," says Dewey, "method is thoroughly

individual. Each person has his own instinctive way of going at a thing; the attitude and the mode of approach and attack are individual. To ignore this individuality of approach, to try to substitute for it, under the name of 'general method,' a uniform scheme of procedure, is simply to cripple the only effective agencies of operation, and to overlay them with a mechanical formalism that produces only a routine, conventional type of mental quality." In his volume on "How We Think" and elsewhere he gives also, with certain warnings thrown out, excellent outlines of general method. In the paragraph following the one quoted above we find, for example, this excellent analysis of the general method of efficient teaching, following closely the general method of learning:

The *primary* factor in general method, so construed, is the existence of a situation which appeals to an individual (the pupil) as his own concern or interest, that is to say, as presenting an end to be achieved, because arousing desire and effort.

The *second* point is that the conditions be such as to stimulate observation and memory in locating the means, the obstacles, and resources that must be reckoned with in dealing with the situation.

The *third* point is the formation of a plan of procedure, a theory or hypothesis about the best way of proceeding.

The *fourth* is putting the plan into operation.

The *fifth* and last is the comparison of the result reached with what was intended, and a consequent estimate of the worth of the method followed, a more critical discernment of its weak and its strong points.

These five points may be reduced to three more generic ones. The *first* and fundamental condition of right method is the existence of some concrete situation involving an end that interests the individual and that requires active and thoughtful effort in order to be reached. The *second* is consideration of the nature of the problem, the difficulty or perplexity involved in reaching the end set, so as to form a suggestion or conjecture as to the best way of proceeding to solve the difficulty. The *third* is the overt effort in which the thought of the plan is applied and thereby tested. Scientific method will be found to involve exactly the same steps, save that a scientific mode of approach implies a large body of prior empirical and tentative procedures

which have finally been sifted so as to develop a technique consciously formulated and adapted to the given type of problem.

These principles of procedure most in accord with the learning process of the student deserve wide illustration and application to the various types of teaching. (1) The first principle is that of motivation, or providing the situation. The little child who, for example, suddenly notices on the piano a box of candy which he immediately wants very much to get has before him, or is immersed in, a natural situation where the motive for action is very real. If the parent had placed the candy there and then had led the child to notice it, we should have not a purely "natural," but a teaching, situation. (2) The conditions here are such, especially if this is a new situation to the child, as to "stimulate observation and memory in locating the means, the obstacles, and resources that must be reckoned with in dealing with the situation," for the child naturally sizes up the situation, probably looking at the piano-bench or stool, at a low chair, or his high chair, and thinking vaguely that these might be utilized in reaching the candy. (3) Next comes a plan or theory of action, a tentative solution to the problem. He thinks of climbing upon the piano-bench, perhaps, and trying to reach the candy, or he hesitates between the use of the bench and the chair. (4) He tentatively decides upon and tries out one of his methods, say the use of the bench, gets upon it, probably with some effort, and reaches upward. (5) If he finds he is too short to reach the candy, he instantly estimates the value of that plan at zero. Other natural steps may here be added: (6) He next gets his high chair and (7) with it reaches the candy, and (8) credits the plan one-hundred-per-cent good. The method is one of self-activity, and the teacher is not obtrusively present. What is true of the little child is true, in general, of the adult.

Teaching as the Supervision of Learning.—The ideal of the best teachers is to make the teaching process the unob-

trusive guidance of the learning process, as natural as the undirected activity of the little child in solving a problem by adapting means to ends, by weighing alternatives, and by putting forth persistent effort of a self-active kind. In the ordinary artificial type of school it takes great ingenuity on the part of teachers, principals, and supervisors to approximate the lifelike naturalness of the situations of the child in the home and of the man and woman at their daily work in the natural life of the world. One of the greatest changes taking place in methods of teaching and administration is just along this line of making more natural, meaningful, and lifelike the learning process of children in school. Instead of spending their time in making merely formal technical joints of wood in manual training, for example, children are more and more given the opportunity to make things, often in co-operative groups, which they really desire to have, as they desire and make their kites, dolls, baseball diamonds, wagons, caves, playhouses, and the like, outside of school. They are put into natural situations where they will wish to solve problems involving arithmetic, and where they want to write plans for, work out, and test letters and compositions. Through careful guidance of this kind children are gaining habits of independence in working out the solutions to practical problems as near like the problems of every-day life as possible. We must train children to be effective in life by placing them in life situations and guiding them to power and control over them as unobtrusively and as much behind the scenes as possible. The educational weakness of the average life situation out of school is that it lacks either in skilled guidance, progressive sequence, breadth of outlook and connections. The teacher's aim is ultimately to make herself useless. When she is forever at the centre of the stage doing all the talking, acting, experimenting, illustrating, and thinking she is not guiding the learning process and she is not educating

children, except for a certain "education in stupidity." The happy mean here is difficult of attainment in most schools.

V. THE TYPES OF TEACHING

Although they all follow a somewhat general plan, different phases of teaching and learning may be emphasized. One writer discusses several phases under the following headings, to which we add briefly their several meanings.

"*Expression*," giving children opportunity to learn through self-expression and doing things rather than being mere passive listeners and manipulators of second-hand knowledge.

"*Practice*," encouraging children to perfect themselves by repeated efforts in the various skills which they must obtain.

"*Objectification*," making the learning of children concrete in the sense of being objective, "object-teaching," laboratory apparatus, demonstrations, excursions, use of material things, pictures, etc., for illustrations.

"*Induction*," helping children to do their own thinking through the discovery of principles from particular facts, finding similarities which embrace many experiences, learning through the use of type studies, following the five formal steps of Herbart as refined by Dewey in his "How We Think."

"*Deduction*," giving children ability to select the principles which govern particular cases which are problematic to them, to apply general principles to particular problems, and to gain power in guiding conduct in the light of generalized experience, and reciting by topics under certain conditions.

"*Formal Association*," helping children to learn the meaning of words of language and formal linguistic symbols, by associating symbols with meanings, if possible in their

concrete life settings rather than in a highly artificial manner.

“*Study*,” giving children ability and opportunity to get knowledge, develop habits, gain ideals, and establish interests, attitudes and appreciations through their own independent efforts, training in the technique of the learning process, including, for example, memorizing in the quickest and most economical manner, and getting command of the various tools of study such as the use of dictionaries, cyclopedias, references, etc.—teaching as the supervision of learning.

“*Discipline*,” so guiding the life of the school as to promote the best working spirit on the part of all and as to avoid disorder and the breaking down of the learning process: by holding up good examples, by giving clear ideas of the meaning, value, and purpose of conformity to the social order of the school and community, and by expressive control, such as giving opportunity to act out, to work off, wayward emotions in desirable ways, rewarding desirable actions and expressions, neglecting undesirable actions and robbing them of their stimuli, surrounding children with incentives and stimuli to worthy efforts, and removing temptations to undesirable actions, putting the stamp of disapproval of school and teacher upon unworthy action, and by substituting channels of desirable response for those which are offensive. (Also used in the sense of training.)

“*Appreciation*,” cultivating the esthetic feelings and responses of children, such as a sense of humor, love of the beautiful, spirit of sportsmanship, taste in dress, love of good music, love of desirable forms of recreation and harmless enjoyment, etc., and furnishing ways to provide esthetic expression along the various lines these responses are to be cultivated. (Also used to cover interests, tastes, prejudices, points of view, etc.)

“*Instruction*,” giving information to children directly by short talks, reading, etc., in which the children take the

part principally of listeners and the teacher that of the story-teller, the lecturer, the instructor—the principal method in German and French schools.

“*Investigation*,” encouraging children to learn things for themselves, to go to sources and facts and interpret them for themselves, to gain power in independent study.

“*Development*,” a blend of the two types above, in which teachers and pupils co-operate, and there is more of “give and take” in the lessons—large use of question and answer, or Socratic, method, and careful guidance of the pupils’ self-activity.

“*Recitation*,” in the present restricted sense of the term, hearing the children report on what they have studied, a memory lesson largely. (Frequently used for any lesson not a study lesson.)

“*Examination*,” testing rather large units of subject-matter in a more or less formal manner, frequently by having pupils write on what they have learned and have been taught—desirable as an incentive and review, especially for older pupils; gives pupils educative opportunity independently to organize and clarify their knowledge or improve their habits.

“*Review*,” fixing learning by repeating, applying, and reorganizing it at less frequent intervals than the brief recall of related, apperceptive knowledge at the daily recitation or lesson.

“*Assignment*,” helping children when left to themselves, to take up new work or to drill on old work in an effective and economical manner, without, however, robbing them of their own opportunities to grow unaided—usually slighted as a phase or type of teaching.

Other Lists.—Such a list of important phases and types of teaching is valuable in calling attention to the richness and variety of methods by which to achieve the various educational aims with the manifold types of children at various times. The most important of these types are each

given a chapter in Earhart's volume on "Types of Teaching," treating each of the following topics:

The nature, development, and purposes of subject-matter, the ideas, attitudes, and feelings, and the instincts, and habits with which children come to school, what school education should accomplish in remaking, extending, socializing, and individualizing the child's experience, the various types of class procedure such as the telling exercise or lecture type of method, the object-lesson, inductive and deductive lessons, the appreciation lesson or exercise, habit formation, study, the assignment, the recitation lesson, reviews, socializing phases of school work, and making lesson plans.

Strayer, in his volume in "The Teaching Process," deals with the various phases of teaching under nineteen different headings, such as:

The aim of teaching, the instincts, attention, drill, inductive and deductive lessons, appreciation lesson, study lesson, review or examination lesson, the recitation lesson, questioning, social phases of the recitation, the physical welfare of the children, moral training, class management, lesson plans, the supervision of teachers, the course of study, and measuring results of education.

Each of the authors distinguishes seven different types of lessons: inductive, deductive, drill, study, review, appreciation, and recitation (memory) lessons.

Charters, in his "Methods of Teaching," has a different organization of material, but treats in close relation with the school subjects much of the same matter, stressing very helpfully the structure, function, value, and treatment of subject-matter. If possible, every teacher should read and digest at least one of these three different treatments and test out, phase by phase, the different principles advanced. Each is written by practical teachers in touch with actual school problems who have studied scientifically the technical principles underlying teaching.

High-school and upper-grade teachers will find Parker's "Methods of Teaching in High Schools" (Ginn) and Colvin's "An Introduction to High-School Teaching" (Macmillan) very helpful.

VI. TYPES OF LESSONS

Lesson Steps.—The contribution which Bagley, Strayer, and others have made in analyzing and isolating the various (7) types of lessons should also be made the heritage of every teacher. Herbart and his followers devised one scheme or series of steps or stages to be used for practically every lesson. It is of the inductive type and follows methods of teaching used in Germany where text-books are little employed and, in a rough way, the steps described by Dewey above as a general method. These "five formal steps" of preparation, presentation, comparison and abstraction, generalization, and application, were long used by professional teachers for most types of school work. But we do not wish a child always to be thinking through for himself the solution of a problematic situation, since there are many other than problematic situations in life and many other needs for teaching. We may, for example, wish to cultivate appreciation and love of good music, and may therefore have musicians, pianolas, or victrolas perform before classes, with no thought on the teacher's part of developing ability to solve problems in music or in any other fields thereby. The aim is appreciation, not thinking ability. Other aims such as habit formation, training in study, testing results, review, gaining information largely through memory, and so on, are largely overlooked by those who would apply slavishly these five formal steps to all lessons. Even Dewey's general method cannot be used for every lesson, or as a method-whole covering several class periods, although it is of the greatest value for a large share of the best teaching. Neither Dewey nor Herbart intended, however, such slavish

application of the steps and the former specifically warns against such wide use. As we shall show, the *problem* is a very valuable centralizing factor for making purposive and organized the development of many types of knowledge, habits, ideals, and appreciations. Frank McMurry and Dewey speak of it as the fundamental stimulus and guide to learning, and would organize most subject-matter of a course of study not as a series of topics in outline but as a progressive series of *problems*, projects, and questions. Our point is that it should not be used exclusively, and that many types of lessons are desirable.

In general, we can teach pupils to think and to work things out for themselves along various lines; we can develop their ideals and appreciations in many directions; we can drill them in habits which are necessary and which they would not get without such drill; we can furnish them with knowledge or information of the complex world in which they live; we can provide them with recreation; we can organize, correlate and unify their mental connections of whatever sort; we can help them apply their knowledge, skill, and ideals to life situations they will be sure to meet, and are meeting, and we can test, measure, and summarize their mental and physical attainments.

Teaching Children to Think.—To attain the various social aims of education no ability on the part of children is regarded, in theory, with more approval than the ability to think along various lines. "The life of reason," or the life guided by reason, is the goal of our democratic schools in these changing times. Even in a primitive, static, and monarchical system or society, ability to think well is of great value to the individual although not encouraged by the state along social and political lines. If America is to solve the problems, individual and social, which now beset her, she must rear a thinking population. If the individuals are to attain the goal of life they must have this, their highest capacity, developed and made habit along the

lines of the principal problems of life. General thinking ability we may not be able very fully to develop, but we can give power along many specific lines such as those of health, the calling, citizenship, recreation, and morality, by guided exercise in these fields.

In studying the methods of training children to think in the past, teachers have been much confused and hindered by artificial and needless distinctions between inductive and deductive thinking. They have frequently spent more time and effort in attempting to distinguish the two types, often indistinguishable, than in learning the important thing—how to teach pupils to think. We shall attempt here to point out no more than the general method.

The Problem.—In his masterly attack on formal logic, entitled, "Formal Logic," Professor Schiller asserts that the answer to the question, "Why do we think?" was first discovered by Professor John Dewey. The fundamental stimulus and provocative of thinking Dewey found to be the *problematic situation*, in other words, the new and strange situation, the difficulty, the doubt, the perplexity, the crisis, the dilemma. The task of devising a way by which to get some candy from the top of the piano was to the little child before mentioned a problematic situation, a problem. Had he obtained candy several times in that precise way he would not have needed to think at the time mentioned. His habits of pulling up the high chair, climbing on it, and reaching for the candy would have sufficed without thinking. Thinking arises, if it arises at all, when our customary habits fail to enable us successfully to meet a life situation. To plan and to make a chair is a problem to a boy in the manual-training shop, but to a chair-maker in a chair factory it is mere habit. To the untrained teacher, the arrangement of the school programme, the provision of suitable ventilation, the treatment of a sick pupil, the arrangement of the daily lesson plans,¹ the refractory pupil,

¹ Doctors Earhart's and Strayer's books give practical suggestions for making daily lesson plans.

and so on, are all problems. By experienced, professional teachers these situations are met almost entirely on the basis of routine habit.

When travelling over a new route, for a further example, we come to a fork in the road and know not which way to choose, we are in a typical thinking situation, although commonly there are more than merely two alternatives. But in this forked-road situation, unless we are impulsive, heedless, obstinate, thoughtless, we stop and consider, "wonder," "reflect," "reason," "investigate," "think."

The first principle of teaching children to think is to put them into a problematic situation, and since we wish to give them ability to think on the affairs of life, not on Chinese puzzles, we have the corollary that this problematic situation must be, not some problem of x, y, and z, how Cæsar could build his bridge, or his indirect discourse, "how many angels can stand on the end of a pin," or any other remote situation unrelated to the main life needs and problems of our people, but must be as real and concrete a problem as children and grown-ups are meeting all the time out of school. *The problem is the world's greatest educator.*

The Tentative Solutions or Hypotheses.—When we are confronted and stopped in our daily habitual activities by a problematic situation, such as, shall I buy a new hat, what kind of hat shall I buy, what shall we do this evening for entertainment or profit, where shall I go this summer, shall I open and shut the school-windows or have a pupil do it, etc., our minds naturally dwell on the alternatives before us. The summer may be spent at many places, each with its good and bad features from our point of view. By looking over the situation more thoroughly we may find a way in which to spend the summer more profitably and pleasantly than ever before. If we are at the forking of a road into two or more branches we try to see what each of these alternatives would mean if followed up. If the prob-

lem is what are the causes of deserts we encourage the pupils to give several alternative answers or tentative solutions, without letting them know what we think the causes are. We encourage them to think of several possible solutions to the problem, and we usually find it easy to get them from a wide-awake class. Here arises a second great rule of thinking: *when confronted by a difficulty, or problematic situation, cultivate a variety of alternative solutions to the problem.*

By cultivating such variety we vastly increase our, or the class's, chances of thinking out, or hitting on, the right or best solution. The boy who knows of the possibilities of but one or two occupations will not be as apt to choose the best occupation for himself and the public as one who, by some kind of vocational guidance, learns of several or all of the various opportunities before him. Many of us spend much of our time foolishly or in mere drifting because for the various hours of the day or week we do not consider the many profitable ways in which such time may be spent. People say we lack imagination or that we do not think. When we urge a class or an individual pupil to suggest other possible solutions to the problem before it, we shall frequently get silly or stupid answers, especially if the children have never had any training in thinking in school. But some of the seemingly silly answers may turn out to be correct, and these silly or weak answers, if sincere, show that others than the best pupils are trying to contribute to the class product; and moreover, these answers provide good training in testing and caution for both those who make them and for the others. The number and quality of the suggestions will depend upon our experience, our memory, our imagination, and our ability to get from others tentative solutions.

Testing the Hypotheses.—This comes out in the third step of thinking in which we *test* our various tentative solutions, conjectures, guesses, hypotheses, alternatives, the-

ories, notions, ideas, or whatever we may call them. We examine each alternative critically for advantages and disadvantages. The infant trying to get the candy considers more or less carefully the relative advantages or disadvantages of the piano-bench, another chair, the high chair, etc., for helping him solve his problem. We let our minds go along the various roads before us trying to discover which will best lead to our destination. We consider the various possible ways of spending the summer and balance advantages and disadvantages. The class offers in step two several reasons or causes for deserts which the teacher writes on the blackboard, perhaps, as a list of possibilities, and which the class now criticises. It may find on consideration of the merits and demerits of the various answers that, for example, a combination of causes named is in their best judgment the correct solution. The teacher may leave them for a time with this notion, or she may lead or help them, or tell them outright the correct answer. If she does this before the pupils have done this testing work, however, she has defeated their thinking and robbed them of the opportunity. This is, perhaps, the worst single fault of teachers, considering the importance of such training.

The great principle here, then, would be to lead the pupils to test out in several ways, or in all possible ways, the tentative solutions which they can summon out of their experience, their imagination, or from their authorities. A corollary would be to get them to take a pride in avoiding jumping at a conclusion, in keeping their minds open, realizing that a better answer may yet be given, in cultivating the scientific habit or attitude of mind which Dewey in his preface to "How We Think" says is one thing most needed in American education. Too many of us make hasty conclusions, fail to test with any care the few or many hypotheses we bring to birth, gather from our friends, or from our reading, take things on hearsay without test, close our minds to new suggestions, thinking we have the one and

final answer to anything or everything, fail, in short, to control, and guide the thinking process.

Concluding.—The final step is the conclusion. We pass judgment or decide that the answer is so or that we cannot discover the answer. The class finally concludes that the cause of deserts is so and so; we decide that we shall go to a certain place next summer because it outweighs all in a surplus of advantages over disadvantages; we decide to start our auto, our wagon, or our feet along the road which we think is better or best. Our thinking stops when we make the decision. After that, habit sets in and our walking or driving is merely habitual. It takes time for a class to go through such a process, perhaps several days or weeks for the entire "method-whole." Several good pieces of wood may be spoiled by the boy who is working out the way to make a table. We do not naturally take easily to thinking. It is travail and hard work. It is easier to follow the crowd, to read from the book, to follow our first impulse or piece of advice from another, in short, to dodge thought. But only by thinking do we gain power to solve problems along the line of our life problems—by solving them, not by accepting ready-made answers which our teachers, our books, and our friends are so ready to furnish us. These we frequently solicit and use as mere hypotheses to test, but not as substitutes for our own educative self-activity. Frequently, in a class it will be desirable to make an explicit statement of the problem with which we start.

Applying.—A fifth step, not in the thinking, but in the lesson or series of lessons, and practically always taking place in a real-life situation, is that of going on and *applying* the principle arrived at as the conclusion. We have thought out the best way to make a table and now proceed to make it. We have come to a conclusion as to where we shall spend the summer and proceed to go there or make preparations for spending it as decided. Frequently this step of application shows us that we have erred in our thinking

and usually points out exactly where we made our error. Our plan when carried out gives us a very poor table, a conclusion that will not work, a principle that fails to square with the facts. After considerable thinking, a graduating class, for example, decided that the members would purchase a piano for the school. But when they attempted to raise the needed contributions only a few were willing to pay the proportionate amount. It was then too late to think out another solution. They failed in not testing this hypothesis by seeing if a sufficient number would pay the proportioned amount at the earlier date when they did their thinking. We older people frequently, and some continually, bitterly regret our neglect of important phases of thinking which we could easily have worked out had we been more systematic, more energetic, and more conscious of, or better trained in, the technique necessary to good thinking; examining carefully our problem, rousing as many good tentative solutions or suggestions as possible, testing each of these suggestions and comparing, contrasting, and weighing them for preponderance of advantages over disadvantages. It is fortunately the able and worthy, usually, who think well and succeed, and the weak, defective, and unworthy, who think poorly, or not at all, and fail. The steps many follow in class are: (1) problem, (2) hypotheses, (3) tests, and (4) conclusion. Our mission as teachers is to increase vastly the number who can use this highest instrument of evolution, the ability or abilities to reason along the several lines desirable for ourselves and the public.

The Limits of the Problem Method.—Shall we then attempt to arrange all of our school work as a series of problems, or can we depend upon mathematics to give us such general abilities? As suggested, some seem to incline to the former view in the previously quoted selection. To both, the answer is no. *Much* of the work can be arranged as problems for thinking. The department of economics of the University of Chicago, for example, has recently pub-

lished a book of problems for class use covering the entire subject of elementary economics and providing practically little other reading matter in exposition of the subject, although sources are utilized. History, geography, hand-work, hygiene, and other subjects, may be, and are being, largely organized on the problem or "project" basis. Arithmetical problems are becoming more lifelike, dealing with number relations which pupils meet with or will very probably meet. Mathematics can hardly get over the weakness, however, of making necessary a certain type and order of thinking, largely deductive, which is different from the kind of thinking described above, which we carry on according to the natural way in which the mind functions and according to which it is best to meet the problems of life. Furthermore, ability to think, even exceptionally well, which many may gain by perseverance in one field, is no guarantee that one will be a good thinker in other fields. We have tested the theory (hypothesis, suggestion, or conjecture) of formal discipline and have so far found it wanting. Our minds as teachers are open, but wisdom indicates that we can get both valuable information about the world in which we live and power to think in that world better, or only, by getting our training in solving, not formal, symbolic, or unlifelike problems, such as those of cube root, and rowing a boat, etc., but the actual problems of life. All teachers should study Professor Dewey's little book on this subject mentioned above, "How We Think." Strayer's two chapters in his "The Teaching Process" on the inductive and deductive types of lessons are helpful short statements of methods. Freeman's book on "How Children Learn" contains a valuable chapter on "Problem Solving or Thinking."

The Drill Lesson.—Thinking takes place when our already formed mental connection between situations and responses are not adequate to promote satisfying conduct. Life is so complex and new situations are so frequent to-day

that the practical needs of life demand in all an ability to think and adjust themselves to changing conditions. After we have thought through a situation and adjusted ourselves to it, we have also practically thought a connection through our minds. Practice and drill make the connection relatively permanent. For example, a teacher or pupil in a strange city or locality is in doubt as to the best route to the school the first time he is to go to it. But after considering and testing alternative routes, a way is decided on and finally taken each day. In a short time teacher or pupil leaves his home and walks to school unconscious of the route taken and with his mind probably busy with something else. The connection made by conscious, attentive, vigorous thinking is the wire or wires laid by the master lineman, which are hereafter to carry automatically the stimuli from the given situation, the street, over to the muscular responses which control taking the proper route.

Both with children and grown-ups we do not always find thinking forging ahead of habit and making the connection. We have not time, opportunity, nor ability to rediscover all knowledge and invent all answers to all the problems of life. Much is furnished us outright as the outcomes of others' thinking, as vicarious experience. We are heirs to millions of connections which we simply must or do take and make. We merely appropriate the connection which binds temporarily the response to with the situation—the teacher, class, and conditions making for an attitude of interest, confidence, and obedience—and the stimulus, five times six; and the teaching and study processes make it more or less permanent. The tool subjects, or the tool phases of subjects, like writing, reading, spelling, the fundamentals in arithmetic, drawing, construction work, and so on, are practically all habits to be formed. The laws of memory and of habit formation are practically the same in essentials and for many purposes can be treated together.

Drill may be defined as *the systematic endeavor to fix*

firmlly habits or associations between stimuli and responses. The stimuli may be either outer sense situations, or inner, mental situations, or ideas. The mental connections or associations may, then, be formed automatically between the following sets:

Sense Stimuli.....	tied to.....	Movements
Sense Stimuli.....	tied to.....	Ideas
Ideas	tied to.....	Movements
Ideas.....	tied to.....	Ideas

Some of the leading laws and factors of so-called drill may be stated as follows;

1. Decide very carefully in the light of educational principals what habits and associations should be made automatic or habitual, the minimal, essential habits necessary, and those which are optional or alternative. Avoid drilling on non-essentials. Twenty per cent of the usual conservative schooling is probably relatively non-essential. We have not yet selected the essentials of democratic education in either urban or rural communities.
2. Arrange the matter—facts, habits, skills, knowledge—in order best suited for economical habituation or memorization. Be consistent and systematic in drill.
3. Be sure in most cases that pupils have a good motive for drill, that they understand and feel the need of making habitual certain mental connections. Put vigor, enthusiasm, and vividness into the drilling. If possible, avoid lifeless, monotonous, undesired drill.
4. Have the connections, the responses to the various stimuli, repeated in an unvaried form. Avoid attempting to make habits or permanent associations by even a few repetitions.
5. Have repetitions carried on for an optimal period or periods daily, and over weeks and months of time, until learned as well as is desirable, or reasonably possible, with the given pupil or pupils and under the given conditions.

If possible have standards of achievement such as the Courtis tests in arithmetic, the Ayres, Thorndike, and Freeman scales and standards in penmanship, and in spelling, the Courtis and Thorndike rates in reading, and so on. Excuse pupils or give other work to pupils who are up to or above the standard for their grade. Get pupils to compete with themselves by trying to better their past performances. Avoid failing to distribute the automatic learning over considerable periods of time, attempting too much or too little, and do not fail to give opportunities to use in practical ways, or in life-situation ways, the connections being formed.

6. Permit no exceptions or inaccuracies to occur until the habits or ideas are firmly established. Avoid "breaking training" and doing things in other ways than in the ways in which they are to be firmly established. Afterward is the time for innovations.

7. Get pupils to take a pride in the firm establishing of their own habits when they are not under the teacher's care.

8. Give additional attention and emphasis to connections of especial difficulty.

9. Be sure that pupils are in right physical and mental health for drill and choose the best times for it.

10. Use your examinations, reviews, tests, and measuring-of-results periods partly if not largely for educative, distributed repetition and drill.

The Recitation, or Memory, Exercise or Lesson.—This rather poorly named phase or type of the teaching process is quite ancient and refers not to the class period in which teacher and pupils get together, as it is commonly used, but to only those types of class periods or instruction periods in which pupils report, recite, or repeat what they have learned in study, and consequently deals more with the content phases of study than drill phases. The old plan, still widely used in some parts of the world, was to have pu-

pils repeat word for word what they learned in a book or had been told. It is desirable for children to gain facts and to possess in memory and to be partially acquainted with a wide variety of accurate information. A lack of information or first-hand experience handicaps one greatly in his thinking, for he has few sources of suggestions and of various ideas of accomplishing things. But to teach information in such a way as to give pupils not ideas which they can profit by but mere "words, words, words," is to commit the common error.

Some of the factors of success in the use of this type of exercise or lesson as one of several other types to be used in the period are to use topics and hold pupils responsible for reciting on them, clearly, accurately, and at some length, using the best principles brought out on memory in such volumes as Strayer and Norsworthy's "How to Teach," and to drill on the facts that are to be thoroughly and permanently learned after they have been carefully and conservatively selected.

We cannot treat of all the seven types of lessons at length here, but the most important have been considered. The lesson in appreciation should be studied in this connection. In general, teaching is an art which is more intricate than the art of medicine; and the science supporting it is only partially discovered, organized, and applied. A good teacher will study the process as she would any other problem of science. Certain sex differences in teaching country children will be brought out in the following chapter.

PROBLEMS IN APPLICATION

1. Into what three "fundamental methods of class instruction" does Professor Colvin classify ways of teaching? (Chapter VIII and the six following chapters of his volume on "An Introduction to High-School Teaching" (Macmillan).)
2. What specific rules does he give for testing the knowledge of pupils, drill, and adding new knowledge?

3. How does this classification compare with that made by Professor Parker in his "Methods of Teaching in High School" (Ginn)?
4. How do you account for the great amount of space taken by the above writers in telling how to train pupils to think?
5. What are the seven types of lessons given by Strayer in his "Teaching Process" (Macmillan) and Earhart in her "Types of Teaching"? Do these authors name any types not covered by Colvin's three and Parker's five?
6. As a principle of teaching why does Parker furnish a book of "Exercises for 'Methods of Teaching in High School'"?
7. What are the psychological bases for the "project method," or use of projects in teaching? Compare your answer with that given by Professor Kilpatrick in the *Teachers College Record* for November, 1918 (published by Teachers College, Columbia University, New York City).
8. What educational magazines do you take or propose to take as a teacher? Have you seen the *Elementary School Journal* for elementary teachers, and the *School Review* for secondary teachers, both published by the University of Chicago Press? What rural-school magazines are published? Are they as yet of value on methods of teaching?
9. What suggestions do you obtain twice a month from *School Life*, published since August 1, 1918, by the U. S. Bureau of Education? If you do not have it, send to Washington for it. (Free to administrative educational officials; fifty cents a year, twenty-six numbers, to others.)
10. Apply the principles of method given in this chapter to the subjects you expect to teach or are teaching.

SUMMARY BY POINTS

1. The teaching process is controlled by the nature of children and of society. Present-day educational science is helping to give definiteness and precision to methods of teaching.
2. Classroom management is a corollary of the teaching process in schools and deserves more attention and study than it usually receives. Some of the principal aims of education are furthered by scientific class management.
3. Teachers should make the natural child and his interests the 'point of departure in teaching.'
4. Motivation of teaching along the many lines suggested by Wilson helps children to grow up naturally, guided and energized by worthy purposes. The main problems of attention are met in this way.

5. There are many types of teaching. In general, we are developing knowledge, habits, ideals, and appreciations of service to the individual and society in meeting the fivefold aim of education for social efficiency.
6. The elements of general method are (1) a motive or felt need, (2) consideration of ways of meeting the need, and (3) effort put forth to test and apply the plan decided upon.
7. The guidance of the learning process should be unobtrusive on the part of the teacher.
8. Several lists of types and phases of teaching frequently discussed by teachers are briefly examined.
9. The seven types described by Strayer in his "Teaching Process" and Earhart in her "Types of Teaching" are recommended for study and guidance.

BIBLIOGRAPHY

1. Alderman—"School Credit for Home Work." Houghton Mifflin Co.
2. Bagley—"Classroom Management." Macmillan.
3. ——"School Discipline." Macmillan.
4. Betts—"The Recitation." Houghton Mifflin Co.
5. Brice—"Measuring the Efficiency of Teachers." Public School Publishing Co.
6. Colvin, A. R.—"An Introduction to High-School Teaching." Macmillan.
7. Dewey—"Democracy and Education," also articles in Monroe's "Cyclopedia of Education." Macmillan.
8. ——"How We Think." D. C. Heath & Co.
9. ——"School and Society." University of Chicago Press.
10. Freeman—"How Children Learn." Macmillan.
11. Earhart—"Types of Teaching." Houghton Mifflin Co.
12. Hall—"Educational Problems." Appleton.
13. Judd—"Measuring the Work of the Public Schools of Cleveland." Russell Sage Foundation.
14. Kendall & Mirick—"How to Teach the Fundamental Subjects." Houghton Mifflin Co.
15. McMurry, Chas.—"Conflicting Principles of Teaching." Houghton Mifflin Co.
16. McMurry, F.—"How to Study, and Teaching Children How to Study." Houghton Mifflin Co.
17. ——"Elementary School Standards." World Book Co.
18. Monroe's "Cyclopedia of Education." Macmillan.

19. Parker—"Methods of Teaching in High Schools." Ginn & Co.
20. Rapeer—"Teaching Elementary-School Subjects."
21. Strayer—"The Teaching Process." Macmillan.
22. _____ and Norsworthy—"How to Teach." Macmillan.
23. Thorndike—"Education." Macmillan.
24. _____ "Principles of Teaching." Seiler.
25. Suzzallo in Monroe's "Encyclopedia of Education," article on
Teaching, Types of.
26. Wilson—"Motivation of School Subjects." Houghton Mifflin Co.
27. Yocom—"Culture, Discipline, and Democracy." Christopher
Sower Co.

CHAPTER XIX

THE COUNTRY GIRL AND THE CONSOLIDATED SCHOOL

PRELIMINARY PROBLEMS

1. What disadvantages has ordinary country life for girls and women?
2. What measures would you propose for remedying these conditions?
3. What might a school thoroughly adapted to the needs of country girls and women do for them that the single-room school is not doing?
4. What organizations for girls and young women have proved of help in the country?
5. What books and magazines would you suggest for the country girls?

I. THE LARGER OUTLOOK

A New Problem—The Country Girl.—The industrial history of the last decade in the United States is marked by the way in which the farmer is rapidly coming into his own; his welfare and the cultivation of his broad acres are receiving an unwonted share of public attention. The government of the United States has assigned, for the farmer's welfare, a Department of Agriculture, at the head of which is one of the eight members of the President's Cabinet. For the use of this department Congress annually appropriates vast sums of money and employs an army of experts and experimenters. Probably no interest, industrial or commercial, receives more appreciative attention or more generous monetary assistance or has easier access to the ears of the country's lawmakers than that which concerns the cultivation of the soil.

The teacher and the preacher, the lecturer and the author, have helped sound the call for the better country-life

movement, and the farmer has been the centre of interest in it all. Next to him in public concern are the farm boys, their clubs, their education, their training for better farming, and last but by no means least, the methods by which the promising ones are to be kept free from the influence of the city attracting them away from the farm. Very recently, in a corner of the magazine or farm paper, the farm woman is receiving a share of attention. The Department of Agriculture not long ago started an investigation of her special needs. Through it all, even when the spot-light centres on the farm home, very little has been said of the country girl. She has not yet greatly impressed the book writers, the social inquirers, or the lecturers as a fitting subject for investigation. She has as yet received little inspiration to take her place in the movement and assume her share in the effort to find solutions for the manifold rural problems. Yet one need not have prophetic vision to see that unless she assumes her portion of the new responsibilities and shares the benefits of the new prosperity and the advantages of the generous endowments, these services to the country can have little permanent effect. Only a short-sighted policy would neglect the mothers of the race.

Despite this apparent oversight on the part of the reformers there are several millions of country girls working industriously and, let us hope, happily on the farms of America. They are helping their mothers in the kitchen and the household, not only sharing with them the "hewing of wood and the drawing of water" but too often carrying both to the remote kitchen. They are gardening and canning; cooking and sewing; caring for the cows and the chickens and the younger children; sharing the barrenness, the drudgery, the poverty, and the isolation of the country women in the home. Yet with all this, it is not the work nor the hardship, difficult as it is, but the systemless, objectless, drudgery; the lack of appreciation or value placed upon their contribution in the economic scheme; the con-

tentment with methods as they are, craving no alleviation, that most tries their souls. It is not strange that many of them, like their brothers, are drawn by the lure of the towns and the cities; for the country girl shares the burdens that fall to her brother and receives relatively few of the advantages the country-life movement is bringing to him.

II. WHAT THE SCHOOL CAN DO

The School's Responsibility.—Americans are committed to the belief that the safety of the republic is in the keeping of the public schools. Instinctively, almost, we look to them to carry out if not to initiate the reforms we believe necessary for our civic preservation. What more natural, then, than our belief that the ultimate solution of the rural-life problem must come from the rural school? And where may we hope for adequate education in the country except in the consolidated school? What then can it offer to the country girl that she, too, may find the possibility for a happy and contented life on the farm; one that satisfies the American girl's longing for economic independence and her craving for the broader outlook and the abiding satisfactions? What are the causes of the country girl's discontent and how can the consolidated school help her to eliminate them? What are the limitations of her environment, physical, moral, and esthetic, and how can the school help her to remove them? What can it supply which will add to her possibilities for a happy and serviceable life as a country girl, and what shall it offer to prepare her for her life work, whether it be as a farm-home maker or as a wage-earner in an industry or profession to which her inclination may lead?

The majority of women, whether in the city or the country, will doubtless continue to devote a great portion of their lives to home-making. But the country girl's prospects for the future should be no narrower than her

reasonable hopes and desires. In the short time that women have been permitted to take a place in the economic world outside the home, few of the gainful occupations have not been successfully invaded by them. In all of these the countryside has been drawn upon to fill the demand for women of character, talent, and ability. There are many illustrious examples to inspire the country girl. Jane Addams and Clara Barton, George Eliot and Harriet Beecher Stowe are among the many country girls who have added lustre to philanthropy and literature. The recent war has added a whole new chapter to the possibility of women in all fields of enterprise.

The Educational Scheme.—Before attempting to formulate a scheme for the education of the country girl, it is well to inquire as to her needs and aspirations. Happiness is a legitimate end of education; it is the goal of social, civic, and economic endeavor. We have been accustomed to look upon the country as the ideal rearing-place for the young; surely nature intended it to be, and a civilization which crushes or stifles its possibilities for childhood and youth deprives them of their richest inheritance. But is the country girl happy in her surroundings and is she effectively creating happiness for others? We have had our eyes opened of late to the isolation of the farm home; to its lack of the comforts and conveniences most ordinary to the city dweller; to the dearth of social intercourse and the lack of recreation in the country, and to the absence of the possibilities for cultivating and satisfying the esthetic and spiritual tastes of the young.

The country girl during the swiftly changing years of her young womanhood is keyed to a higher emotional pitch, has a more sensitive nervous structure, and feels more keenly the elation or depression of her environment than her brother. She is confined to the house more closely, has fewer activities, and less freedom and fewer opportunities for expressing her imaginative and emotional

nature. She is inclined to feel the full loneliness and deprivations of her environment and, unless wisely directed, even to exaggerate them. Thus the country girl is not always the happy, bright-eyed, care-free, and contented person that we wish her to be, and the consolidated school may well direct its efforts to help her to achieve and create individual and social happiness more efficiently.

Health.—The first essential to happiness and serviceableness is the achievement and conservation of buoyant vitality and perfect health. This should be the heritage of every country girl. Recently, however, our attention has been called to the lamentable fact that country children are less healthful and that more of them suffer from preventable diseases than the children of the cities. Round shoulders, narrow chests, bad teeth, imperfect eyesight, and even anemia, are common among country girls. The drudgery of housework in farm homes without modern conveniences for lightening it is often too great for their strength. The physical labor of the outdoor work often left to the women is too great a tax on the growing girl. Insanitary conditions around the home, polluted water-supply, lack of fresh air in sleeping-rooms, the hardship of cold rooms, and long walks over wet roads in the winter time often impair the health of the young girl who lives in a home or attends a school in which hygienic regulations are not heeded.

To such as these the consolidated school should open the door and point the road to renewed health. This must be done in general by the extension of the school influence into the homes and among the adults of the community. It must be done in particular by systematic training of the girl in the school. Modern schools in the country as well as in the city should contain a gymnasium with equipment for physical exercise, games, and folk-dancing. The whole health problem should be in charge of a physical director who may, or may not, devote part time to regular courses, who should have charge of the instruction which the school

offers in personal hygiene, and who should be physical inspector and adviser to the girls. The physical instructor should be able to devote some time to work in the community, including visits to the homes and lectures on home and community sanitation.

The health of the country girls is of the utmost importance, not alone because of their own welfare but because they are to be the mothers of the coming generation. They should, therefore, have careful instruction in all that relates to the acquiring of physical perfection and the preservation of good health. Of what use are the larger crops and the richer fields if the health of the mothers and children does not justify their enjoyment of these benefits?

Recreation.—Equally essential to the young girl's happiness is the opportunity for wholesome and enjoyable recreation in the society of her friends and companions. Country life in many communities offers far too little opportunity for refined leisure; the means of enjoyment and social relaxation are far too meagre to satisfy the yearning which all young people have for pleasure. Too often there is no common meeting-place of easy access; there are few forms of entertainment available or accessible to the young people of the countryside, and this dearth of possibilities for social intercourse drives many young girls to long for and if possible to seek the more appealing and attractive amusements of the near-by town or city. Here is a great opportunity for the consolidated school to fill the aspiring and hopeful hearts of the young girls in the community with wholesome happiness. With its gymnasium for basket-ball and other co-operative social or team games; for the artistic folk-dances of the nations; with its auditorium for plays, lectures, pictures, musical and literary entertainments, and the like, it can be of inestimable value and enduring service to the community. A good swimming pool is especially desirable for girls and women and has proved its value in many country schools.

These activities have a social value by no means confined to amusement. Character is formed during one's leisure far more than during one's working hours; opportunity for civic and community service usually occurs outside the working day. The habits for spending leisure in noble and elevating or useful pursuits, the habits which result in an avocation, are acquired in childhood and youth. The woman is largely what she has learned to be during the hours outside her working time in her youth. Recreation has a broad and powerful moral aspect. Nearly every girl has a talent of some kind and delights in expressing and cultivating it. If in the arts, music, literature, the drama, painting, lace-making, it may offer an outlook for an avocation of a highly profitable and pleasurable nature as well as be a means of culture. Good taste in amusement is a bulwark against the temptations of the cheap theatre, the public dance-hall, and the sensational motion-picture show. The pleasure of companionship, the friendships based on mutual interests formed and fostered through the social life of young girls at school, the little talents, the special abilities that come to light during these associations, are permanent sources of enjoyment throughout adult life as well as in youth.

Few games or exercises give more pleasure or offer better advantages for developing grace, lightness, and agility than the beautiful folk-dances now in vogue in city schools. Besides, they are especially adapted to the country; they originated among country folk and express many of the ideas and emotions of the country people. They should have a place on the schedule of every consolidated school for both boys and girls in the lower grades and for girls through the high-school years. The folk-dances are free, vigorous, wholesome, modest, and graceful, and are the best possible antidote for the questionable taste cultivated by the ultra-modern ballroom dances, from which recent wide-spread interest not even the remote country districts

have altogether escaped. Too many country communities are now confined to dancing for amusement. Even for these the folk-dances may at least add some variety, and new standards of deportment. Supervision and training are essentials.

Every country girl should have a knowledge of music, at least enough to enable her to enjoy and appreciate it, and she should be familiar with some of the masterpieces of music. She should also know the world's great pictures and something, perhaps, of the lives of the artists who created them. The school auditorium should by all means have a piano where the young student pianists may have the opportunity to express themselves through their developing musical talent. There should be a school chorus, one or more quartets, and if possible an orchestra. Phonographs are now procurable at a relatively small cost, and excellent records, some of great artists, can be had to accompany them. These records reproduce the world's greatest musical selections and may be had in such variety as to please every kind of musical taste. The possession of a phonograph with well-selected records not only adds to the pleasure of the girls at the schools but offers an excellent method of cultivating their taste for good music.

Lightening Household Tasks.—The consolidated school should devote itself to freeing the farm woman from the drudgery of an endless round of monotonous duties which could be avoided by the installation of modern conveniences in the home. This is the special duty of the school because every subject in its curriculum, if related properly to the practical things concerned with the girl's life, will lead directly to this result. Its full accomplishment may, and probably will, mean educating the rural community to better methods of living and more economical means of working. Only as country people rise above monotonous routine can they have an intellectual and spiritual outlook. Fortunately, there are thousands of country girls gifted either by nature

or education who love the glow of the sunset, the songs of the birds, the smell of the fresh air, and the growing things, and who have the leisure and the developed appreciation to enjoy them. But there are others, if not an equal number at least the "vital minority" whose testimony Mrs. Craw gives in "*The American Country Girl*," who work from five o'clock in the morning until nine at night in dull routine. Their days are endless rounds of milking, churning, baking, dishwashing, sweeping, and carrying wood and water. Night finds them too tired to do more than tumble "wearily into bed until the next morning." Their work has no intellectual stimulus, no acknowledged ideal purpose. They are, as Mrs. Craw says, "too tired to go out even if there were some place to go, and too destitute of initiative to seize on any form of pleasure."

The wave of progress toward efficient housekeeping which has swept over the country has not yet impressed the country people. Labor-saving devices for the out-of-door work are not matched by others for within doors. In some way the farmers must be brought to realize that water piped into the house, a lighting system, a heating-plant, a vacuum cleaner, and similar labor-lightening arrangements are as necessary as mowing-machines, separators, and similar machinery for facilitating the farm work. There is a home workshop as well as an outdoor one, and neither should be equipped entirely at the expense of the other. Both should be equipped well. The country girl needs to learn the value of organization; how to systematize the work of the home; to keep accounts carefully; to know the value of the card catalogue; in short, how to conduct the work of the household on a scientific basis. Of still greater importance, the country girl should be educated to a realization of the broader meaning of life. Not all the training of farmers should be concerned with growing better crops and making more money. Better living, especially for those within the homes, is of greater importance, if the best

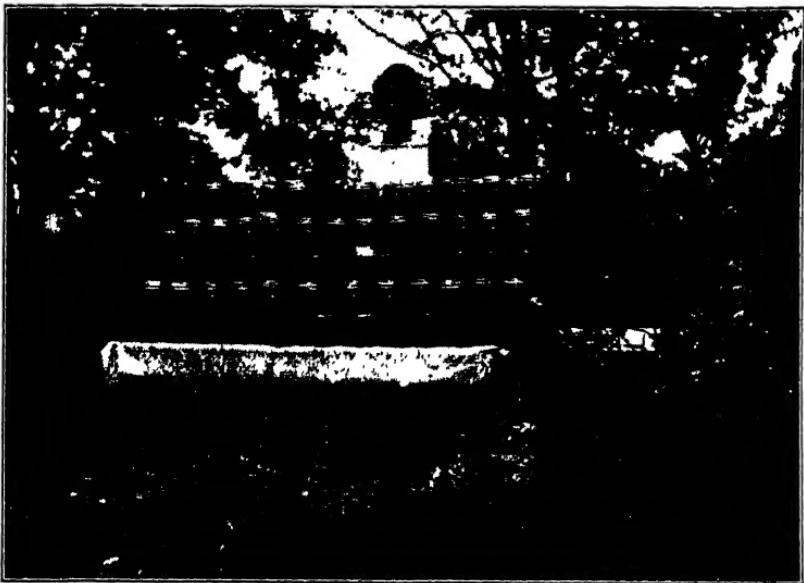
of the young men and women are to be retained to build up the farms of the future. For all of these purposes the school, through its regular and special courses, is peculiarly adapted and every day becoming better equipped.

Economic Independence.—Another important factor in the happiness of the country girl is the gratification of her desire for economic independence, not necessarily complete independence but enough to enable her to earn a reasonable amount of spending money and to have the privilege of spending it in her own way. Every self-respecting girl needs some money and she doesn't want it doled out grudgingly by the farmer, who had no spending-money when he was a boy and believes that what he had is good enough for his children. This type of farmer often thinks that the same type of school he attended is good enough for his children. It isn't; times have changed with the young people's needs as well as with the instruments the farmer uses to till the soil and harvest the crops. The country girl should be given a fair money allowance for her share in the house or farm work. Unfortunately, many girls are not. These girls the consolidated school can make happier by teaching different ways of making spending-money.

The canning clubs have helped many girls to do this and have helped the parents to appreciate the necessity of allowing their daughters to have money in order that they may learn to spend it wisely. The girl who has a clear idea of the value of money and knows the wise relationship between income and expenditure has advanced morally as well as economically. A significant story is told of a small club girl in one of the Southern States who earned over a hundred dollars in tomato canning but was not allowed any of it to spend. "Pap" used it all, she explained to the club director. The next year the wise director sent out cards for the parents' signature, exacting a promise that the girls should have the money they made for their own



Outdoor group games for girls at the Cache La Poudre consolidated school



A canning-club girl, Oregon

use. This father refused to sign, until a letter from the director came explaining why the girl should have the proceeds of her work and declining to admit her to membership unless with the promise that she be given the profits. This time "Pap" signed. There are many other ways of making money which the country girl could learn at school. Lace-making or fine sewing, trimming hats, laundering delicate waists and fine linens, supplying tables from the home garden, and making jellies or home-cooked foods are some sources of income now being utilized by ambitious country girls.

These requisites are but the minimal essentials for the country girls if they are to find happiness in the farm community—health, recreation, freedom from drudgery, and reasonable independence. With this accomplished the mission of the consolidated school is not ended—it is merely begun. For it must supply to the country girl an education which fits her to carry her share of the burden of the new movement for an enriched country life, and it must offer to her a continuing source of spiritual inspiration; and intellectual and social satisfaction to her successor, the farm woman.

Education for Life.—What can the consolidated school offer besides the narrow curriculum of the one-teacher school with its many grades and small classes and its narrow opportunities for acquisition of culture and of practical knowledge to fit the country girl for her "place in the sun" of the new life on the farm?

We have spoken above of education for the leisure of life, the art subjects, play, recreation, the joy of an avocation, all of which it should be the privilege and responsibility of the consolidated elementary and high school to supply to the farm girls. There is also the education involved in the subjects commonly known as practical, which, with the foundation laid by instruction in "the three R's," give the girl an equipment which enables her to make her

own living either in a wage-earning capacity or as a helpmate in the home, according to her circumstances and position in life.

Home-Making.—The workshop of the woman is said to be the worst workshop in the world, and nowhere is this more true than in the country. The farm homes are the last to install electricity, bathrooms, and heating-plants, and the farmers the last to profit by co-operative endeavors which make these conveniences possible at reasonable cost. The consolidated school will be a great factor in promulgating what has already taken root and in extending the propaganda for better and more convenient homes until modern equipment becomes as universally adopted in the country as in the city. The farm girl must learn scientific home-keeping, and the school is the place in which to teach it. As compared with housekeeping, commercial efficiency is relatively easy. It is not difficult for the expert to standardize the movements involved in putting together, say, the fifty parts of a certain portion of the automobile, but it is different, for example, to standardize the making of puff paste for an apple-tart or the act of concocting an old-fashioned mince pie. The work of caring for and building up a home is a complex process, and teaching it may involve the whole curriculum. It is economics chiefly—the income, the expenditures; it is simple mathematics very largely—adding, subtracting, and dividing; it is the sciences—all of them, physics, chemistry, the study of society and community service; the arts, all of them—of expression, design, and decoration; it is music and poetry, literature and religion; it is all of education and the best of life—a field quite big enough for worthy endeavor if there were no other demands for consideration.

The consolidated-school curriculum must organize all of these for school purposes in order that the country girl may have the largest chance to realize her fullest possibilities. The foundation for many of these subjects should be

laid in the elementary school and carried through as electives or required branches, according to community requirements, in the high school. The best consolidated schools now offer excellent practical courses in some or all of the following: household management; laundry work; cooking and chemistry of food; biology; house-planning and interior decoration; household and community sanitation; economics; nursing; social science. The majority of these are, of course, electives. Household administration and mechanics, gardening, poultry, and bee-keeping, are eminently practical subjects, and may be offered for both boys and girls in the consolidated school equipped as it should be with laboratories, shops, and experimental farm. The girl equipped with a knowledge of any group of home-making subjects in which she can specialize according to her ability and which she can continue through the agricultural college will be in little danger of a monotonous life. There will be for her the joy in work which comes from constantly meeting and solving problems which test her intellect, what Professor Fiske calls the "challenge of the difficult."

The minimal training which the country girl should have for home-keeping should include plain sewing, cookery, the study of foods, household accounting, home decoration, and sanitation. With a knowledge of these essentials, a developed intellect, and a desire to grow, the country girl should find happiness and a life of service in her farm home.

Other Vocations.—The consolidated school will also include among its duties the responsibility of preparing young women for the vocations. Not all country girls will wish to remain in the country; not all of them to prepare to be housekeepers. The high school in the country, through differentiation of courses and by offering a wide range of electives, may at least start the girls on some wage-earning vocation of their choice and for which they are fitted by natural ability. There are a variety of occupations from which to choose, a foundation for which can be laid

in the country high school. A few are suggested in the enumeration of subjects for home-making courses, for example, nursing, home decoration, gardening. Many young women with talent for any of these find pleasant and profitable employment in their home neighborhood, or in the cities of the county.

Teaching offers an attractive field to many young women who feel the call for work which involves the missionary spirit. Many forces are now at work for the upbuilding of rural schools and for improving salaries, living conditions, and school housing in rural districts. This field ought to have a peculiar attraction for the country girl with a spirit of loyalty to the soil and a sympathetic insight into the needs of rural life. Rural-school work is a splendid field for service, and the regular academic courses in the consolidated school admit directly to the first-grade normal schools, where the country girl should specialize by taking at least her major courses in the department of rural education.

For those girls with talent in music or art, the consolidated school can offer intelligent direction and an opportunity for enlarged appreciation. To those who wish to enter business—to be stenographers, clerks, milliners, dressmakers, or enter other commercial pursuits—the school may, if it is large enough, offer special courses. It can at least foster the talent for these which girls among its pupils possess, and advise and assist them in regard to further training, and it can help them in selecting the courses which will be most serviceable when they enter industrial life. For example, the girl who plans to be a stenographer and typist needs all the English, composition, literature, spelling, social science, history, and current events which the school can give, at the expense of such courses as algebra, German, Latin, French, and perhaps even the ordinary old-line physics. Similar emphasis and eliminations are possible for girls preparing for other occupations.

III. ASSOCIATED ACTIVITIES

The Teachers' Cottage.—Each year sees additional rural-school plants equipped with the teachers' cottage or teacherage. Its use came about because of the necessity of providing better homes for rural teachers than the community in many instances afforded, the desirability of securing permanent rather than itinerant teachers, and because there is general agreement that a revised curriculum which embodies the material suited to the needs of rural communities requires that the school grounds be cared for through the summer months. But the cottage was so obviously useful for demonstration purposes and as a model example in good housekeeping for the community and as the laboratory for study of the household arts and sciences that its function is rapidly being extended. In many instances the teachers' cottage is serving the schools' girls as it should practical training in household work of every nature—furnishing, decorating, sanitation, cooking, sewing, and the allied branches.

Whether the cottage is the home of the principal or superintendent and his family, or, as in many instances, it serves as a co-operative housekeeping plant for several teachers, its hospitality should, from time to time, be extended to the pupils of the school. This, of course, is applicable chiefly to high school, because pupils of high-school age are most susceptible to the influence of the social graces and conventionalities of refined entertainment and the virtues of unobtrusive, unaffected, and wholesome hospitality. The teachers' cottage is, of course, expected to be only the background for the class, club, or school affairs, the pupils themselves acting as hosts and hostesses and assuming the responsibility of any decoration, entertainment, and refreshments, or the like, as are desirable for the occasion. The arrangements should not be elaborate except in very special cases, but should emphasize the unassuming nature of genuine social graciousness.

Social Activities.—The American high school has been defined as the people's college, and the consolidated high school must surely realize this function. Not only should it educate the young people of the country, but it must serve as their centre of social relaxation and be a continuation and extension school for all the community. Many consolidated rural high schools are now realizing all of these functions. They are advisory and experimental stations and social meeting-places, not alone for farmers and their wives, but for the farm girls who have finished school, or those who have been deprived of the opportunity to attend school. The consolidated school should have a circulating library, either on its own accord or serve as station and distributing centre for the country or town library. A school which fosters a love for good reading and supplies the books is a high type of continuation school. The services of a travelling instructor in home economics, made possible by the Smith-Lever Act, can be placed at the disposal of enterprising rural communities, and what place is more fitting or so well equipped for lecture and demonstration work as the laboratory or kitchen or demonstration cottage of the consolidated school? Sewing classes or clubs, gardening clubs, or groups interested in any phase of practical or cultural education may meet in the social rooms of the consolidated school for conference and improvement, and enjoy the advice and counsel of the specialists engaged by the school, or of visitors who can be brought there for special occasions. Such meetings give an opportunity for the development of leadership, which is needed among country women as well as men. The regular courses of the school, the games and social organizations are all fitted to train for the leadership which should manifest itself later in the adult groups.

The school auditorium should be used for community singing for adults as well as for school children, and by a community orchestra, where one can be organized, under



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A garden project by girl scouts

the directorship of local or imported musicians. Branches of such organizations as Y. W. C. A., Girl Scouts, women's section of the International Congress for Farm Women, Camp-Fire Girls, and the like, may be formed among the young women in and out of school, with the schoolhouse as a meeting-place. The Y. W. C. A. has taken a serious interest in the life of the country girls, has organized many clubs among them, and provides special workers for rural districts.

We have previously discussed the social possibilities of the school auditorium, and all that has been said of its necessity in behalf of the country girl applies equally to the farm woman. The musicals and dramatizations, entertainments, the lectures and picture-shows form another phase of her continuation school, and also supply social intercourse and refined amusement. No one needs this relaxation more than she, for on the isolated farm she is usually the most lonesome person. Her work is the most monotonous and her monetary rewards at least the most meagre. These will be dealt with in the next chapter. Great are the possibilities of the consolidated school for the country girl! It can fit her for a happy and useful life in her chosen field of endeavor. It can bring to her when her school life is over the fulness of culture from the outside world and the richness of life's most abiding satisfactions.

PROBLEMS IN APPLICATION

1. Make a list of difficulties which farm women face that could be better met by means of improved home education in consolidated schools.
2. Secure Dr. Lumsden's bulletin No. 94 from the U. S. Public Health Service on "Rural Sanitation," and from it make up a list of things that an organized group of girls and women could do for health in a consolidated district.
3. Secure Evelyn Dewey's book on "New Schools for Old," published by Dutton & Co., New York, and from a close reading of it make a similar list of things to do applicable to a consolidated district.

4. Secure one or more of the surveys of rural life by the Presbyterian Board of Home Missions, and list in a note-book the principal needs of the country women surveyed and the suggestions made for meeting these needs. What applications of these surveys can you make to a typical rural district with which you are acquainted?
5. Read Crowe's "The American Country Girl," given in the bibliography below. What phases of the volume impress you as most helpful and practical?
6. Make a list of the chief "modern conveniences" needed in most country homes for making the life of the farm woman less of a burden. How much would these cost to introduce into a typical country home in your section? What would be the best methods of securing them?
7. What subjects which country girls study could best be displaced by other subject-matter and training? What phases of elementary and high-school work are usually of little comparative value to country girls and prospective mothers and managers of households? What subjects should girls be taught separately from boys in the consolidated school?

BIBLIOGRAPHY

1. Allen, W. H.—"Woman's Part in Government." Dodd, Mead & Co.
2. Bailey, L. H.—"Woman's Contribution to the Country-Life Movement," in his "The Country-Life Movement in the United States." The Macmillan Co.
3. ——— "Woman's Place in a Scheme of Agricultural Education," in his "New York State Problems." J. B. Lyon Co., Albany, N. Y.
4. Broadhurst, Jean—"Home and Community Hygiene." Lippincott.
5. Butterfield, K. L.—"Opportunities for Farm Women," in his "Chapters in Rural Progress." University of Chicago Press.
6. Cabot, Ella L.—"Volunteer Work in the Schools." Houghton Mifflin Co.
7. Carver, T. N.—"Principles of Rural Economics." Ginn & Co.
8. Crowe, Martha F.—"The American Country Girl." Stokes Co.
9. Denison, Elsie—"Helping School Children." Dodd, Mead & Co.
10. Dewey, Evelyn—"New Schools for Old"—the story of Mrs. Harvey's noteworthy work for the Porter School. Dutton & Co.
11. Field, Jessie—"The Corn Lady." Flanagan.

12. McKeever, W. A.—“Farm Boys and Girls.” The Macmillan Co.
13. Presbyterian Board of Home Missions—“Rural-life surveys of a number of typical counties in the United States.” New York.
14. Quick, Herbert—“The Brown Mouse.” Bobbs-Merrill Co.
15. ——— “The Fairview Idea.” Bobbs-Merrill Co.
16. Richards, F. H.—“Hygiene for Girls.” D. C. Heath & Co.
17. Vogt, Paul—“Rural Sociology.” The Macmillan Co.

CHAPTER XX

RURAL RECREATION AND CONSOLIDATION

PRELIMINARY PROBLEMS

1. What part does the lack of suitable recreation and wholesome enjoyment play in the reasons given by our youth for leaving the farm?
2. What types of recreation are common in the part of the country with which you are most familiar?
3. What types could well be added?
4. How do you account for a very common antagonism to play and recreation, and especially to organized purposeful effort to promote it in the country?
5. What are the verdicts of the Roosevelt Country-Life Commission, the National Country-Life Association, and other organizations and surveys respecting avocational efficiency in the country?

I. PROBLEMS OF AVOCATIONAL EFFICIENCY

In an analysis of social efficiency into the five great aims of education, namely, vital, vocational, avocational, civic, and moral efficiency, we can see that one of the purposes always to be held before a system of public schools is that of promoting avocational efficiency. "The right use of leisure" is one of the great aims of life, and one of the leading problems of life is to use wisely and well the leisure period. For most workers in our country the eight-hour daily period of work is becoming standard. One of our state superintendents of public instruction made an address not many years ago in which he spoke vigorously against granting the eight-hour day to laborers, because it gave them too much leisure. He argued that it is necessary first to train people to use their leisure wisely if they are to be

granted much freedom from toil. To throw open suddenly large periods of the day for a great population that has not previously been trained to use this leisure well would only mean the degradation of that people.

On the farm the period of leisure is just as important as in the city, but cannot always be provided for in the same way that it is there. It must come more according to seasons rather than being provided for during each day perhaps; but Sundays and winters, Saturday half-holidays, and other times are available for considerable recreation.

The ordinary attitude of a great many people in this country is that time not spent in work or sleep is largely wasted. They look upon play as something unnecessary. They consider work the big important thing in which one can engage in this world. Little preparation or thought is given to recreation, to wholesome enjoyment, to the right use of leisure; and the consequences to individual and social welfare are not good.

Let us examine this ordinary attitude and point of view and see if it is sound, either philosophically or historically. What is the goal of life, anyway? For what are we living? Are we "here because we're here," as the boys in college sometimes sing, or can we see some deeper motive and purpose in life? Most persons who have not thought on the problem answer very vaguely, indefinitely, and unsatisfactorily when confronted by this question. The answers are various and often self-contradictory. They are unsatisfactory both to the one who makes them and to the examiner.

The best answer we can give to this question, to state the matter briefly, is that the goal of living is individual and social happiness. Christ said, you will remember: "I came that ye might have life, and that more abundantly." The goal of living is *living*, as our very instincts tell us. To make this living more abundant, richer, and happier is the goal of all of our endeavors. We engage in work for the

purpose of making happier and better our daily living. We must make work as much as possible a direct means to happiness through the democracy of industry, but this is of itself entirely insufficient. We are not living a life of slavery and toil in order to prepare for some distant future life beyond the grave. The only way to prepare for a future life is to live well this life. Education is not a preparation merely for a life to come when the individual is an adult; it is life here and now, and the child has just as much a right to and need of happiness in his child's life as he will ever have; and the best way to help him to promote the greatest happiness as an adult is to give him training in attaining and promoting happiness as a child.

There are two extreme points of view with respect to this matter. There are first those who make the individual and his pleasure the centre of all efforts, and fail to train him to get his pleasure and recreation in a manner that promotes the highest social good. On the other hand, we have the Spartan-like philosophy, in which the individual is submerged and subjected to the demands of the state. He is put into a machine and made to conform with no regard to his own individual pleasure, but to the needs and demands of the social system. Neither one of these attitudes is correct. The only true social philosophy is the philosophy that finds the goal of life in the processes of normal, happy, efficient social living. It is to promote this that schools and all other social institutions are founded. We work not to discipline our souls, nor to pile up money; we work to promote life more abundant—a richer, happier, better living, not only for the individual, but for all humanity; and not merely for our nation, but for all nations.

On the psychological side we see that the expression of the inherited tendencies and instincts with which people are born usually have as their emotional accompaniments happiness and pleasure; but since we live among a congested world of people, and since these instincts were developed

for a very primitive type of life, it is necessary for us to guide these instincts along lines of habit and efficiency that will promote the greatest human welfare.

The best kind of social life is that which provides for the most harmonious expression of the natural instincts of the individual, for only along these lines shall we obtain the greatest amount and finest quality of individual and social happiness. There is no finer sight in the world than to see the happy, joyous pleasures of children at play. The satisfactions of the instincts of construction, of rhythm, of communication, of curiosity, of mental and physical activity, are among the greatest pleasures of life. In the innocent recreations and enjoyments of living we attain the goal of life very immediately and very directly. Most of us would spend more time in recreation than we do, but usually as we grow older "the prison house of flesh begins to close us in." We get bound up in the habits of our daily work, and we become so changed that we are hardly normal individuals. It is necessary for us to preserve our normality; it is necessary for us to remain young and to keep the youthful point of view. It is highly desirable that we get more happiness and thorough enjoyment in life very immediately and directly, if we can get it, both in our work and apart from our work. We must become as little children if we would enter the Kingdom of Heaven.

Historically, it is very interesting to see how the commonly held attitude toward recreation in this country has come about. The American people have been (1) a pioneer people hard up against the struggle for existence. They have been (2) a Puritan people, a people inheriting a form of theology that is a direct outcome of the medieval world, and the doctrines of other-worldly-ism and asceticism. We are the lineal descendants of people who were extremists along these lines and protested against the levities of the upper classes in the old world.

The attitude of mind that our forefathers brought here

and which became the common public opinion of this country was, first, that of middle-age asceticism. Very largely this old attitude was that man, instead of coming from the hands of his creator pure and undefiled, as it was claimed, was naturally depraved and vicious, that all his instinctive tendencies and emotional delights were debased and wrong, and that the only way by which one could climb up to real spiritual perfection was to subjugate, repress, and drive out his instinctive tendencies. Those who went to extremes along these lines strove to repress and kill their most fundamental and personal instincts. The monks and nuns of the old monasteries and nunneries, and many others following them, as you know, swore the vows of poverty, obedience, and chastity.

One of these companies of people, for example, were the group of religious zealots who came to Pennsylvania and founded the village of Harmony, and later the village of New Harmony in Indiana, and still later the village of Economy in western Pennsylvania. They practised the doctrine of celibacy, and of course gradually and inevitably perished from the face of the earth. No more surely does some other kind of death ensue from the attempt to destroy by repression almost any other of the natural instinctive human tendencies. But these are the traditions and habits of mind which we inherit, and which dominate, especially, our country people.

This philosophy made a school system, a government, a church, a family life, and all other types of life too repressive, unattractive, and unhappy.

The Puritans.—Those who have given us most of our traditions were not only ascetics to a degree, but also Puritans. The Puritans were so sure in their beliefs, so vigorous in their dissent from the rather happy-go-lucky laws and licenses of the upper classes of England, that they were willing to give up home and country, and brave the dangers of an Atlantic voyage and the privations and the enemies

of a new world to carry out their puritanical principles. The old "blue laws" of the East, under which a man could be thrown into prison for whistling on Sunday, or a young couple punished for conversing together on Sunday, in which the burning of witches and other forms of narrow-minded persecution and self-punishment were legalized, are all evidences of this type of mind. It led to that horrible, narrow-minded monstrosity which we call the New England conscience and which has been so often described to us and held up to our horror by literary men.

Effects of Pioneer Life.—Secondly, we have the habits and customs established by our pioneer forefathers still with us. They came here and left their folk-dances, games and pastimes, and recreations of the old world behind them. They entered into the wilderness of woods and rocks, and hardships; they fought the Indians and conquered nature. They lived a hard life, a serious struggle for existence. It was necessary for them in many cases to cut out of their lives much or most that people had held as a normal part of living, a reasonable amount of recreation, hoping that thereby they would provide homes and settled abodes and the comforts that would enable their children or their children's children to have what they denied themselves. But they overlooked the great principles of social custom, social tradition, and social habit. These things eliminated recreations from the population and left little or nothing in their places. The habits of working as many hours a day as there was daylight became a fixed rule and custom. In his home country, the Englishman stops his work at four o'clock in the afternoon, has his tea, and goes out and plays his game of cricket as a regular part of the day's activities. He regards recreation and the right use of leisure as a highly essential part of life, second to none in importance. These customs and these traditions have here all been forgotten, and the average farmer to-day in the United States accepts this social custom with respect to recreation as his mental heritage.

If we are going to build up the right use of leisure and normal amount of wholesome enjoyment and recreation among country people, we must start with the more unbiassed *children* in the public schools and cultivate in them a respect for these things, and train them how to use their leisure wisely, and how to achieve real avocational efficiency. Certainly the life which is now lived does not promote the highest type of living; it does not make for the attainment of the goal of life, for which we all more or less blindly strive.

Why Do the Boys and Girls Leave the Farm? Why do they crowd into the cities? Why do they leave the old folks and "break home ties"? On the farm they would usually obtain a good start in life, very often a farm of their own to till, property of their own which they probably will never get in the city. They have the habits that enable them to succeed on the farm, whereas in the city they will have to learn a new industrial trade or profession. Out on the farm they have all of nature over which they may roam, the most delightful place in which to live that could be conceived, and yet they turn their backs on it and go to the dusty, smoky, dirty city, and live for years in a hall bedroom, taking small wages for their indoor toil, and paying out all or most of what they earn for the bare necessities of living.

The desires for novelty and for change and variety will account for much of this migration. Many of the city boys wish to go to the farm, and in many cases we find in our agricultural schools and colleges that a large number of the students are city-bred. In some cases, too, there is no good opening on the farm any more for one or more of the children of a large family. In other cases the children's natural tendencies and abilities are very clearly away from the farm, and toward business or professional life in the city. But even after we eliminate all of these and many more, we have accounted for only a small proportion of the boys and girls who leave the farm. When we follow them

up and ask them what it was that they disliked on the farm they usually reply: "There was nothing doing."

They mean by this that they have not the same opportunity for the satisfaction of their various instincts and for the normal human delights and pleasures which youths so naturally and rightfully claim; and it is probably this failure to provide opportunity for plenty of wholesome enjoyment on the farm, as much as almost any other cause, that has led to the tremendous stream from country to city. Whereas in 1790 but 3 per cent of our population lived in cities, to-day 50 per cent of the people of the nation live in these small spots scattered over the surface of the whole United States—in some cases gathering together in great congested hordes, living like cliff-dwellers, one over the other, in cities of one to several millions.

The cost of farm products, of foodstuffs, and of living has steadily gone up for a number of years. There is a great economic opportunity on the farm; scientific agriculture is making it possible to do much that never could have been done in the past; but still our boys and girls continue to leave.)

In the city, recreation has been exploited. Many who have seen this natural hunger of the young (and of the old) to obtain the natural and normal instinctive delights and satisfactions have provided amusements of one kind or another in manifold profusion, and have charged people for the privilege of enjoying them. The public dance-hall, the theatre, the motion-picture, the bowling-alley, the billiard and pool hall, the saloon, roller and ice skating rinks, the dime museum, the "slide for life," and a thousand and one other "attractions" have all been cunningly devised to furnish a certain kind of excitement and stimulation of instinctive tendencies in such a way as to provide for the promoters of these recreations the greatest amount of money. To bring in the most money they have made their appeals usually to the strongest and most fundamental instincts,

in many cases in such ways as to injure people as much, or more, than they have helped them through providing the recreation.

The dance-hall and the saloon and den of vice have readily become connected. The recreations are carried on frequently in ill-ventilated and unwholesome rooms. In most cases they are entirely sedentary, the people who have been seated around their indoor tasks all day going to indoor sedentary recreations at night. The baseball game is participated in only by crowding on stuffy street-cars and by sitting on the bleachers, not in playing the game. The cities have allowed mercenary individuals for the sake of the game to exploit, and in many cases to degrade, the young people of our land who should have been provided normal wholesome, social recreation through some other agencies.

Certainly it is true that if country people had held different notions of the importance of avocations and had be-stirred themselves to provide for them, there would be to-day far more happiness both in the country and in the city. The problems of recreation are to discover the best forms, to socialize them, and to get all people to participate reasonably in recreation of the forms which they most need.

II. SURVEYS OF RECREATION

A great awakening has taken place in the United States in the last few years with respect to this great avocational problem. Never before, probably, in the history of the world have people so suddenly realized that the goal of life is not "the getting of a little more land to raise a little more wheat, to get a little more money, to buy a little more land"; that it is not a vicious circle of money-making, nor merely the getting of property, but that it is normal growth and happiness, the enrichment and refinement of living itself. But a few years ago, nearly all of the recreations of the nation were in the cities, and these under private

control with no supervision, practically, by any city or local officials interested in the welfare of the whole people. Recreation was something which one could get if he were able to get it. It was not a right which every one should have for his own happiness and educational development.

The results of this system have been made notorious by many noted writers and investigators. Jane Addams in her "Spirit of Youth and the City Streets" has shown the hideous forms which the natural instinctive cravings of youth take when they are under the blight of a false economic and social régime. Great recreational surveys have been made for multitudes of cities, of counties, and of whole States. We have begun to inquire into the means of promoting the best life of the race through other means than labor.

The Recreation Movement.—In 1907 the writer was a delegate of the Minneapolis Board of Education to the First Playground Festival of the United States, held under the auspices of the National Playground Association of America, which had just been formed. There on the great playgrounds and recreation centres of the South Parks of Chicago, wonder-provoking activities along many lines of recreation and avocation that were desirable and delightful for young and old were witnessed by many thousands of people. At that time play was a thing which was generally considered of little importance at the school, in the home, or anywhere else. The school was frequently placed on a site of land that either allowed little room for the natural play of children, or was so rough, muddy, or in such a dangerous locality as to preclude any possibility of real play. No money was spent at that time, practically, for play apparatus, for the enlargement of school sites, for supervisors of play and recreation, or for anything else of the kind.

Since that time the playground movement has spread over the country like fire in the prairie-grass. Millions are

to-day spent for play and recreational activities by public governing boards for the people's benefit where nickels were spent as recently as 1907. We have certainly awakened to the fact that all work and no play not only makes Jack a dull boy but robs him of the means of obtaining directly and at first hand those things for which we live and move and have our being. Recreation in the cities is rapidly coming under city control. The saloon is being eliminated, and various institutions are springing up to serve its social function. Vice has been driven out, and the dance-hall has been made a place of true enjoyment and education, rather than a means of degradation. The theatre is rapidly being improved, and parks and other recreational centres, libraries, outdoor swimming-pools, free indoor gymnasias, and many other private and public enterprises, consciously directed toward the people's good, are being provided. In the army the most valuable service rendered the youth of our land was in the many forms of education and socializing avocational activities.

Scientific Studies.—In much of this work we are being guided to-day, not by mere sentiment and "common sense," but by first-class scientific experts who have gained their skill through rigid investigation and research. Cities, awakening to the problem of a degraded childhood and youth through misused leisure, and criticising very largely the work of the public schools for not uplifting the people, have determined in many instances to get at the root of the matter by making scientific surveys of their recreational problems through the employment of experts in this field. In these cities all of the many types of recreation have been studied. We need not detail the whole, although few people realize perhaps how many classes of recreation there are and how many types under each class. Our problem here is not so much the city survey and what has been discovered in these investigations as it is to get some light on the country problem. But any careful study of the Springfield

survey, of the Ipswich survey, of the Cleveland surveys, of the Madison survey, of the California survey, or of the recreational phases of the various country surveys made by experts of the Presbyterian Church, will open one's eyes considerably to the opportunities and possibilities in country recreational development, and the eyes of rural leaders and the people generally must be opened if the country is to solve this great problem of promoting avocational enjoyment and true avocational efficiency.¹

III. A PROGRAMME OF RECREATION

The investigations of country conditions show that much awaits to be done and that the people are about ready to take up this newer point of view, and to bring into life that which has been so long eliminated—normal, wholesome recreations. All they need is leadership and training. Give them these and the happy enjoyment of the children in the schools, in the homes, in the country picnics, and on the farms will do the rest.

Some of the great instincts of life which have worked themselves out in forms of avocations are the social instinct, the sex instinct, the instinctive delight in rhythm and music, and the instincts of physical and mental activity.

Practically all of these instincts the psychologist shows us, for example, find normal satisfaction and expression in the dance. But dancing has long been taboo in country districts. "It has rarely been a means for good," the country people say. "It has been a means of injury rather than a help." But the old ascetic, puritanical, pioneer doctrine has had more to do with this attitude than anything else, and there is no good reason why dancing should not be a means of the greatest happiness and purest pleasure and satisfaction for both young and old in the country. To thrive, the danc-

¹A bibliography of surveys may be obtained from the Recreation Division of the Russell Sage Foundation of New York.

ing should be managed by people who see to it that the dance is conducted in the right way, and who will insure that it is made an educational agency. This has long since been discovered in the city. If those who are interested in the happiness and welfare of the young people will get up the dance themselves; will see that the right kind of people are invited; will provide for the right kind of music; will provide the right kind of room, and other conditions in which to have the dance; and will give as much attention and supervision to it as is given to the supervision of the children at school, then good and only good will come out of it.

To-day we are bringing back from "the old country" hundreds of the simple folk-dances which our ancestors danced on the village greens in the olden days. They got from them normal, natural delights and satisfactions. They were considered an important part of the daily life activities. They were combined frequently with religious festivals, and had in many cases a religious spirit and motive. The music breathes a spirit of innocence and purity, quite in contrast with many of the filthy "rags" that one may hear in the dance-hall run for private profit in our day. These old folk-dances we are teaching the children of the cities. Young and old engage in them. They have few or none of the objectionable features of the social dances that are criticised by those who speak of dancing as something to be kept taboo. If we brought back only this one activity into the lives of the country people, throughout the long winter months, at least, there would be a great deal more of wholesome social intercourse among the people of the community; the young people would stay young longer on the farms, and the delights of the farm would be sufficient to hold a great many adult people who find it at present an intolerably sordid bore.

The consolidated school is the natural place for the radiation of this gospel. It is the natural social centre of the community. Where it is, as it should in most cases be,

a first-class consolidated school furnishing free transportation of the pupils, a good auditorium should always be provided. This auditorium can be used as a recreation centre and put to many uses. A dance learned here as physical education, in the auditorium used as a gymnasium or in a separate room kept for the special purpose of a gymnasium, and provided for the children of the high school and their relatives and friends, can be made a very fine educational feature.

We do not need to *start* with the dance, of course. Many other social and recreational activities can be engaged in. But the dance is one of the fundamental recreational inventions of the human mind, and we are discussing it here as a type of amusement that has been frowned upon in the past which can be magically transformed into something noble through the agency of the public schools. Children who learn to dance the natural roundelay and folk-dances will not have the same morbid attitude toward such recreations as they have when they are carried on with most of the people of the community frowning upon them as illicit activities to be engaged in either by stealth or in defiance of social usage. Health, grace, courtesy, physical education, recreation, and normal human delight can be promoted by this one activity alone.

An auditorium or gymnasium of this kind can be used for a great many other recreational purposes. There should be an assembly period of all the pupils every day of the school year and this period should be made one of the most important phases of the school work. This period should usually be not less than thirty minutes in length. Here the whole school comes together as a body each day, and gets a unity of feeling and aspiration which is second to nothing in educational value. Here the young may learn to engage in public speaking, in singing together in chorus the good old songs of all the ages. Here beautiful and inspiring literature may be read or recited by the pupils and

teachers. Here the young may express their dramatic instincts in little plays and dramatizations in which they so naturally delight. A thousand and one beautiful and attractive uses of this assembly period could readily be related.

Francis Parker in his wonderful school of the olden days in Chicago made this assembly period a great educational force, and all of the newer schools that have been springing up in this country in recent years have been putting strong emphasis upon this feature of school life. One of the best phases of the lives of the children in the Gary school system, for example, is the assembly activities of the pupils which are carried on all day long, the assembly-room never being empty, different groups of pupils having their assembly exercises there at different hours of the day.

This room, too, can be made a delightful recreational and social centre for the life of the whole people. In the evening, the school vans that have been used for transporting the pupils during the daytime can be used for carrying the children and the adults to the meeting-place at night. If the auto-van, heated by its own exhaust, is used as a carrier, it can in many cases, as it does in the daytime, carry not one but two loads of people to the social centre for their evening's recreation. Many more, of course, will come in their own conveyances, since the horses on the farm have not appreciably decreased in number, and the Fords and other cars have immeasurably increased. The many ways of spending a pleasant and profitable evening, for the people of a rather large community, in such a social centre, would fill a good-sized book, a book which very much needs to be written to-day to show the opportunities and possibilities in this direction, and to describe in some degree the wonderful achievements which are being made in this direction by many enterprising school leaders in all parts of the United States. We can only suggest them here, and refer our readers to other articles for further explanation and suggestion.

The outside activities of the children on the playground, too, are a great means of recreation. The grounds should be at least ten acres in extent, over an acre for front lawn and building, about two acres for play apparatus and games, a baseball diamond on two acres, two acres for teachers' cottages, and for more than three remaining for gardens, demonstration farm, and a decent living for the principal and janitor. We have suggested twenty acres in our final chapter. No gymnasium activities should be engaged in when children can be taken out-of-doors and given the benefit of exercise and play there. Here all of the good games that every boy and every girl should know, that girls and boys can play with either a few or many children, should be learned. A turning pole or two, basket-ball goals for the boys and perhaps for the girls, swings for all the children, the climbing spar for the boys, and perhaps a jumping pit, will furnish endless delight, recreation, and successful education. These activities are pretty fully described elsewhere. The Boy Scouts and the Camp Fire Girls are splendid recreational inventions of the last few years, inventions which appeal to the natural instinctive life of the children in a rare way, and which direct instinctive tendencies and activities along lines that produce social habits of the greatest value to old and young.

Why were they not discovered and invented years ago by psychologists and educators who knew the instinctive nature of the child we may well ask. The child's original nature and acquired interests crave the activities that are both delightful and socially useful in the long run.

Handicrafts.—Various forms of craftsmanship have their avocational value, and the manual training and farm carpentry will not be without their recreational uses. Here in the social centre, too, is the best place for the school library, the library of the whole community, affording good literature as a means of avocation and education which may radiate to all the homes of the community. These and

many other forms of recreation and avocation may well be promoted in the country school.

Recreation Secretaries.—In a number of city communities recreation secretaries have been employed to give their entire time to such activities. A county might well employ such a person to promote these activities. Some of the work now carried on by such secretaries has been listed as follows by the Playground and Recreation Association of America:

Organization and executive management of outdoor playground system; selection and training of play leaders; selection, purchase, and installation of equipment; planning of buildings and alteration of buildings for recreation purposes.

Responsibility for evening recreation centres.

Responsibility for children's gardens.

Responsibility for conducting athletic badge tests for both boys and girls throughout the city.

Arrangements for the celebration of holidays.

Arrangements for pageants.

Co-operation in the promotion of Boy Scout activities.

Co-operation in the promotion of Camp Fire Girls activities.

Arrangements for summer camps.

Provision for band concerts and other music.

Responsibility for encouraging wholesome home recreation, arranging that games be taught which can be played at home, providing places where parents and children take recreation together.

Studying recreation conditions in different sections to attempt to meet any special conditions found.

Studying private recreation agencies to find recreation furnished, and number reached, to avoid duplication, and find possible ways of assisting by furnishing places for games and meetings.

Supervision of commercial recreation.

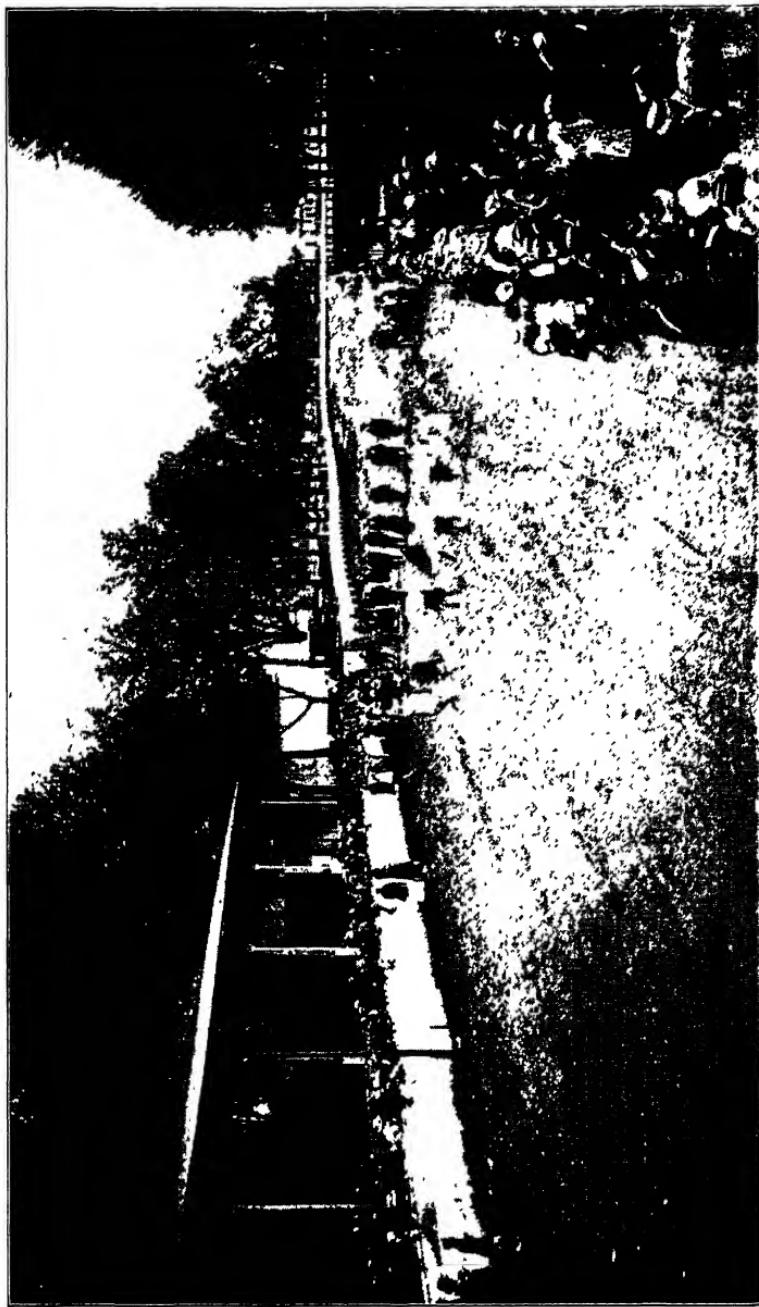
Promotion of play away from playgrounds.

Arrangements for ice-skating in winter, if necessary through flooding of vacant lots.

Arranging coasting places, if necessary by having certain streets set aside and properly guarded.

Placing recreation workers in actual contact with homes of the neighborhood.

Promotion of school athletics, of school baseball, basket-ball, volley-ball leagues, and of all recreation activities for school boys and girls outside of regular school hours.



A field day in Preble County, Ohio

Arrangements for tramping trips.

Interpreting to the public through addresses, through public press, the recreation work which is going on in the city.

Co-operation with other agencies such as the juvenile court, settlements, libraries, churches, and various social organizations.

The country Y. M. C. A. and Y. W. C. A. are to-day doing a great work along this line. The churches are beginning to wake up and give some assistance in the field of recreation, and other agencies are helping the movement along. But it is probably the special privilege, opportunity, and responsibility of the public school to promote this more abundant living. If one of the great aims of education is the right use of leisure, recreation, wholesome enjoyment, or avocational efficiency, then it is one of our principal duties as educators in the public schools, dedicated to the welfare of the whole people, to devise ways and means to bring back into the lives of the people this happy, joyous, esthetic spirit and life which ages of asceticism, of pioneer struggle, and of puritanical narrow-mindedness have too largely driven out of the rural public mind.

To make more concrete these principles of rural recreation we add a typical example of what can be done for recreation and education through one instrument, the motion-picture show. It is contributed by B. A. Aughinbaugh, principal of the rural-school district at Mingo, Champaign County, Ohio.

IV. MOTION-PICTURE PROJECT CONDUCTED BY A CONSOLIDATED RURAL SCHOOL

Getting the Recreation Machinery.—Statistics inform us that a larger per cent of the inmates in our insane asylums come from the rural than the urban population. Experts do not hesitate to place the blame on a lack of wholesome recreation in the rural communities. To overcome this unfortunate state of affairs various projects have been attempted with more or less success. The failure of most of these projects has been found in the fact that they were not sustained enough in their efforts to make the attempt worth while, or

else they failed to realize what recreation really was. Many of the projects also failed to take note of the fact, that the farmer of to-day is not the farmer of the comic sheet, and that he is just as bored by out-of-date entertainment as any city man would be.

Having carefully observed these conditions for a number of years, and watched the trend of times, the writer determined that not only would a motion-picture project be a paying proposition in a rural community, but that it would do a very needed work as well. Consequently, when our community voted to erect a new centralized school and auditorium, I saw to it that the architect, in making the plans and specifications, included in same, provisions for special wiring for operating a motion-picture machine. This consisted in having a number five copper wire run directly from the engine-room to a theatre plug-outlet-box at the back of the auditorium. I did not know just when I would have an opportunity to put my plan into execution, but I intended to be prepared when it did come.

The opportunity, like most opportunities one is looking for, came sooner than I had hoped for. Shortly after the schoolhouse was completed a picture-house failed in a neighboring city, due to poor management and severe competition. The equipment was offered for sale at a ridiculously low figure—one machine, aluminum-treated screen, and booth, for \$110. On a note, secured by the president of the school board, I procured the money from bank and bought the outfit.

On May 31st, 1917, we gave our first show. The electric current supply is derived from a 125 volt, direct current, 60 ampere, $7\frac{1}{2}$ kilowatt, Fairbanks-Morse generator in the school engine-room. The motive power for the generator is a 10 horse-power oil-engine. The generator also supplies the building with electric lights. It requires at least 30 amperes of direct current at 110 volts to get a good picture, if the screen is seventy feet from the machine, as is ours. We however use forty amperes, and this assures us of a brighter, steadier picture with no blue spot in it. The usual light plant equipment found in most modern schoolhouses, where city current is not used, is ample for running a picture-machine arc, that is if at least 3300 watts can be obtained from it (found by multiplying voltage by amperage). Four thousand four hundred watts is better. The amount of light required may be reduced by three things; first, a good reflective screen (a mere muslin sheet is not suitable for motion-pictures as it does not give definition to the pictures and absorbs too much light); second, darkness (darkness is cheaper than light and by contrast assists in producing just as good a picture—stray daylight or lamplight turns the blacks of the pictures into a neutral brown); third, proper lense system (a bad lense is a poor investment at half its cheapness for it fails to

let through the essential light rays). I would advise no one to attempt a picture-show on a commercial basis, as we have, unless he expects to give as good or better screen results than the regular picture houses. He may expect failure if he does. The pictures must be clear, steady and interesting. The small portable machines, intended only for classroom use, are not suitable for public exhibitions of a commercial nature. New machines can be bought for \$300 or less.

The Method.—Our first show was procured from Paramount Company and consisted of Mary Pickford in "Cinderella," a Burton Holmes travel picture, and a Bray cartoon. The programme consisted of seven reels at one dollar per reel. This price per reel will differ in various communities, depending upon the population of the community. But in no case should one leave the determination of this price entirely to the distributors for they are going to get all they can for their films. It is best to find out what some regular theatre is paying, and then work out a little proportion problem based on the population of the city where this picture-show is as compared with your own place. I do not advise persons desiring to try this plan to procure their films from any exchanges but the regular commercial concerns or such as have an equal standing and equal business methods. Inferior companies that pretend to cater to schools and churches, for the most part do not have pictures made by well-known actors, and they usually try to charge most unusual prices. The best exchanges will gladly supply release lists giving the titles of their productions and make quotations. The films of these concerns will be found to cover completely the fields of entertainment, travel, geography, science, literature, etc. Moreover their films are well produced and physically in good condition. The last is a most important item because badly torn or soiled films will never give good screen results.

We have been now operating our show for one year, and in that time we have not only paid for our original equipment, but have bought a second machine in order to give a continuous picture on the screen; erected a new booth; bought a \$700 player-piano; helped a \$300 lecture course out of the hole; procured many additions to our talking-machine and piano records and have done many other things for the benefit of the school and community. We put on a programme each Friday night throughout the year, summer and winter, thus affording continual recreation for this rural community—not the once-a-month sort. The before-and-after-show-visiting of the farmers is a real help in itself. Then, too, we have been able to assist in war and charitable propaganda and also assist the various agricultural societies, and officials educate the farmers through the medium of the screen. Our regular price is ten cents although occasionally we in-

crease this a nickel for something very special. We have never lost on but one or two shows and then it was due to extremely bad weather conditions. Our community numbers only 500 people, but we are able to draw on a much larger patronage due to the fact that we have attained perfect projection and offer clean, entertaining shows. I might mention as examples of the features shown, David Harum, Tale of Two Cities, The Crisis, The Fall of a Nation, Twenty Thousand Leagues Under the Sea, The Man Without a Country, The Re-Making of a Nation (Government Camp Sherman pictures), Evangeline, The Prince and the Pauper, Oliver Twist, etc., etc. We have also taken our audiences around the world with so noted a traveller as Burton Holmes and given them glimpses into the animal world with Dr. Ditmars. We have also provoked them to laughter with Charlie Chaplin, "Fatty Arbuckle," Mutt and Jeff, Bobby Bumps, Douglas Fairbanks, etc.

The Results.—I really feel that we have accomplished our original intention of relieving the monotony of farm life by supplying wholesome entertainment and I do know that the value of farm land has gone up in this vicinity due, as one man put it, to the fact that this place is "alive."

V. METHODS OF ORGANIZING A COMMUNITY FOR RECREATION AND SOCIAL DEVELOPMENT

The importance of organization of the community for recreation and social development cannot be overestimated. The same group that promotes avocational efficiency for the school and the community can work for all of the other four types of efficiency given as the aims of education: vital, vocational, civic, and moral.

The two following practical plans for this work have been prepared by the U. S. Bureau of Education (*School Life*, August 16, 1918) and the State Department of Public Instruction of Idaho (Constitution, in "Handbook for Rural Teachers"):

A. *How to Organize a Community Centre*

Membership.—The first step in organization is to define the boundaries of the community. These ought to be determined along natural lines, such as the territory from which the children in the

school are drawn, or a district in which the people come together for other reasons than the fact that an artificial line is drawn around them. It ought not to be too large.

Being a little democracy, all adult citizens, both men and women, living in the prescribed territory are members of it. It must be comprehensive if the public schoolhouse is to be used as its capitol. It must be non-partisan, non-sectarian, and non-exclusive. You do not become a member of a community by joining. You *are* a member by virtue of your citizenship and residence in the district. Everywhere else men and women are divided into groups and classes on the ground of their personal taste or occupation. In a community centre they meet as "folks" on the ground of their common citizenship and their common human needs. This is the distinguishing mark of the community centre.

The Community Secretary.—Nothing runs itself unless it is running down-hill. If community work is to be done somebody has to be the doer of it. The growing realization of this fact has led to the creation of a new profession. The term applied to this profession is "community secretary," "a cooper of secrets," a servant of the whole community. This community executive should be elected by ballot in a public election held in the schoolhouse and supported out of public funds. There are now four such publicly elected and publicly supported community secretaries in Washington, D. C., and eight more such offices are in the process of being created. It seems certain that it is destined to be one of the most honored and useful of all public offices.

The qualifications for this office are manifestly large and its duties complex and exacting. The ablest person to be found is none too able. The function of the secretary is nothing less than to organize and *to keep organized* all the community activities herein described; to assist the people to learn the science and to practise the art of living together; and to show them how they may put into effective operation the spirit and method of co-operation. Who is equal to a task like this? In addition to intellectual power and a large store of general information, one must be equipped with many more qualities equally important. The seven cardinal virtues of a community secretary are: Patience, unselfishness, a sense of humor, a balanced judgment, the ability to differ in opinion without differing in feeling, respect for the personality of other people, and faith in the good intentions of the average man. Where possible, the community secretary ought to be the principal of the school. But where the principal cannot be released from his other duties sufficiently to undertake the work the secretary ought to be a person who is agreeable to the prin-

cipal, in order to insure concerted action. In thousands of villages and open-country communities the teacher's work lasts for only part of the year and the compensation is shamefully inadequate. This is a great economic waste as well as an injury to children. If these teachers were made community secretaries, were given an all-year-round job, and were compensated for the additional work by a living wage, it would mean a better type of teacher and a better type of school. The bigger task would not only demand the bigger person, but the task itself would create them. Moreover, when the teacher's activities become linked up with life processes the community will be the more willing to support the office adequately. It seems clear that the office of community secretary is the key to a worthier support of the school. It will magnify the function of teaching, give a new civic status to the teacher, and make more apparent the patriotic and constructive service which the school renders the Nation.

The Board of Directors.—However able a community secretary may be no one alone is able enough for the constructive kind of work which the community centre requires. Since it is a co-operative enterprise, it is necessary that it be democratically organized. The next step in its organization, therefore, should be to provide the secretary with a cabinet. It may be called a board of directors, or a community council, or an executive committee. These names suggest its various functions. Its first function is to give council and advice to the community secretary, to act as a little forum for discussion, out of which may develop wise methods of procedure. Its next function is to share with the secretary the responsibility for the work, the burden of which is too heavy to be borne by any one alone. But the cabinet is not a legislative body alone, to determine what is to be done, but also an executive body as well. It is not only an executive body, to carry out the general plans of the association, but also a body of directors to plan and conduct special kinds of activities. In every community there are men and women who have the ability and leisure to render public service. As directors they would have a recognized position and channel through which they can more effectively render such service.

Each director ought to be the head of a department of work, or at least the head of every department of work ought to be a director. The head of each department ought to choose the members of his own committee. Thus, by having the heads of departments work on the board of directors the entire work of the association can be frequently reviewed, and the departments of activity can, by co-operating, not only avoid needless waste through duplication, but also stimulate each other. The board of directors ought to hold regular

meetings in the schoolhouse, and in order that the work may be responsive to public opinion the meetings ought to be open to any who wish to attend them, just as the meetings of a town council are open. The community centre stands for visible government and daylight diplomacy.

The Trouble Committee.—It is not so difficult to organize a community centre; the difficulty is to keep it organized. By no means the only one, but the chief means of securing a permanently useful community centre is to have a wise and constructive programme, big enough to merit interest. A good way to formulate such a programme is to appoint a permanent committee which we may call "the trouble committee." The function of this committee is not to make trouble, but to remove it. Its task is to discover the causes of trouble in the community, to learn the reasons for dissatisfaction, to state the problems which ought to be solved, to exhibit the thing that needs to be done.

The function of the trouble committee is to furnish nuts for the community association to crack. No one believes in diagnosis for the sake of diagnosis any more than he believes in "amputation for the sake of amputation." Its only use is to reveal the disease and to point the way to a remedy. The aim of the trouble committee is to point out the difficulties at the bottom of our social problems for the sake of removing them. Whenever they are removed, the problem vanishes. The method of the committee is constructive democracy.

Public and Self-Support.—The finances of an organization usually constitute its storm centre. Money is the kind of thing it is difficult to get along with and impossible to get along without. After a community centre determines its plans and policies, the next question in its organization is finance. But since money is the root of so much trouble, it ought to be kept in the background. It is properly called "ways and means." It is not the end; human welfare is the end. Money is a detail and ought always to be treated as such.

The superior advantage of a community centre over private organizations is that it does not need an amount of money sufficient to cause it any distress. To begin with, there are no dues. They are already paid when the taxes are paid. The schoolhouse, together with heat, light, and janitor service, and in some places a portion of the secretary's salary, is provided out of public funds. Thus the overhead charges are comparatively small. The time will doubtless come when the entire expense will be provided out of public funds, but the movement is new, and for the present and immediate future if the building, heat, light, and janitor service are provided it is all that can reasonably be expected.

A Working Constitution.—What's constitution among friends? It's a necessity if they are to continue to be friends. As the word itself suggests, a constitution establishes the basis on which friends may stand for the accomplishment of their common purposes. Its value is always to be measured by the importance of the purpose to be accomplished. Inasmuch as the purpose of a community centre is of the highest value not only to the welfare of the local community, but also to the welfare of democracy in the Nation and in the world, the making of its constitution is a highly important item in its organization.

As regards the work of the community centre, the constitution is a working agreement, a clear understanding as to what is to be done and who is to do it. A clear statement will prevent needless friction and confusion. As regards the growth of the work in the community, the constitution will serve the purpose of propaganda. If a new or uninformed member of the community should ask an active member, "What is a community centre and what is its purpose?" a copy of the constitution ought to furnish a full answer to his question. Therefore, it should not be too brief, if it is to answer this purpose.

Each community ought to draft its own constitution, not only because the needs of communities vary, and not only because it should be the honest expression of the community's own thought and purpose, but especially because a constitution brought from outside and dropped on the people's heads has little value for the community.

The Ten Commandments.—While the types of constitutions will be very various, yet there are certain formative principles which are basic in the structure of a community centre. They are so essential to the life of the community ideal that the writer has called them "The ten commandments for a community centre." They are as follows:

I. It must guarantee freedom of thought and freedom in its expression.

II. It must aim at unity, not uniformity, and accentuate resemblances, not differences.

III. It must be organized democratically, with the right to learn by making mistakes.

IV. It must be free from the domination of money, giving the right of way to character and intelligence.

V. It must be non-partisan, non-sectarian, and non-exclusive both in purpose and practice.

VI. Remember that nothing will run itself unless it is running down-hill.

VII. Remember that to get anywhere it is necessary to start from where you are.

VIII. Remember that the thing to be done is more important than the method of doing it.

IX. Remember that the water in a well cannot be purified by painting the pump.

X. Remember that progress is possible only when there is mental hospitality to new ideas.

B. Constitution

ARTICLE I—NAME

The name of this club shall be The.....
Community Club.

ARTICLE II—OBJECT

The object of this club shall be: Conducting public meetings for the presentation and open discussion of live subjects; the physical improvement of the community environment; and the social, moral and educational development of the people.

ARTICLE III—MEMBERSHIP

Section I. Associate Members. Every person living in the vicinity of.....is considered an associate member of this club.

Section II. Any person sixteen years of age and over living in the vicinity of.....is eligible to become an active member of the club upon giving his or her name to any member of the executive committee.

ARTICLE IV—OFFICERS AND ELECTIONS

Section I. There shall be the following officers: President; First, Second and Third Vice Presidents; Secretary, and Treasurer.

Section II. The officers shall be elected at the annual meeting of the club which shall be held on....., to serve for a term of one year each. Only active members shall be allowed to vote for officers, and only active members are eligible to office.

ARTICLE V—DUTIES OF OFFICERS

Section I. President. It shall be the duty of the President to preside at all meetings of the club, and also to serve as chairman of the executive committee of the club.

Section II. First Vice President. It shall be the duty of the First Vice President to preside at the meetings of the club in the

absence of or at the request of the President. He shall also be chairman of the Programme Committee.

Section III. Second Vice President. It shall be the duty of the Second Vice President to serve as chairman of the Improvement Committee of the club.

Section IV. Third Vice President. It shall be the duty of the Third Vice President to serve as chairman of the Social Service Committee of the club.

Section V. It shall be the duty of the Secretary to keep the minutes of the proceedings of the club; to keep a list of active members; to receive names of new members; to carry on the correspondence of the club, and to fulfil such other duties as usually pertain to this office.

Section VI. It shall be the duty of the Treasurer to collect and disburse the money of the club; to keep a record of all money received, spent and on hand, and to report upon the state of the treasury at the annual meeting or whenever called upon to do so.

ARTICLE VI—COMMITTEES

Section I. Executive Committee. The Executive Committee shall consist of the elected officers of the club. It shall be the duty of this committee to confer upon questions regarding the welfare of the club; to consider and recommend matters of importance to the club, and in unusual matters requiring haste to act for the club.

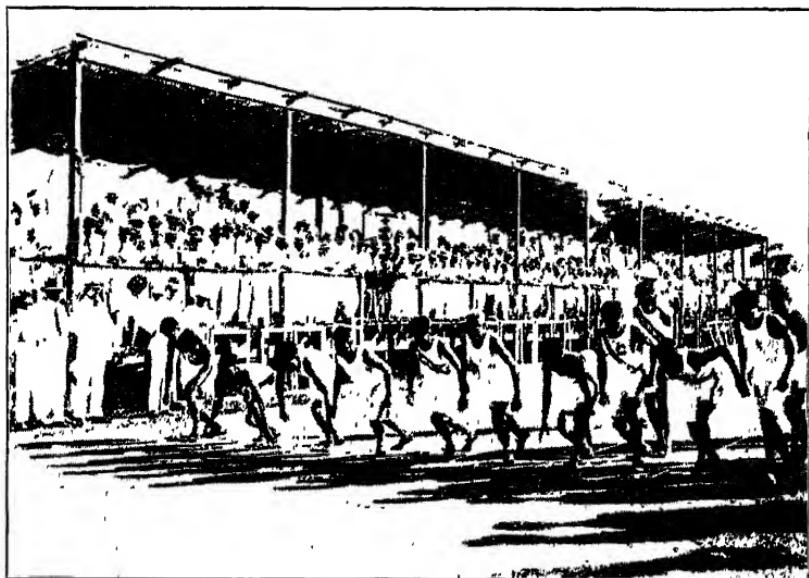
Section II. Programme Committee. The Programme Committee shall consist of the First Vice President of the club and two other members chosen by him. It shall be the duty of this committee to arrange programmes for all the meetings of the club; to secure speakers; and to suggest topics for discussion, which shall insure profitable and interesting meetings; to promote the publicity of the club through the local papers; to announce programmes of the meeting of the club, and otherwise to carry on the work of publicity for the club.

Section III. Improvement Committee. The Improvement Committee shall consist of the Second Vice President and two (or four) other members appointed by him. It shall be the duty of this committee to investigate and bring to the attention of the club all matters pertaining to local community improvement, and to act by direction of the club, in consummating such improvement. (This committee shall look after business needs.)

Section IV. Social Service Committee. The Social Service Committee shall consist of the Third Vice President and two (or four)



Junior orchestra, ages 6 to 12



Vital efficiency through physical education is emphasized in all Philippine schools

other members appointed by him. They shall have supervision of all social, moral and educational activities of the club for the community. (This committee shall look after the social needs.)

ARTICLE VII—MEETINGS

The club shall hold regular meetings each evening, in the , between the hours of 7:30 and 10 o'clock.

ARTICLE VIII—DUES

The dues of the club shall be per year for each active member, to aid in meeting the local expenses of the organization.

ARTICLE IX—QUORUM

Eight active members of the club shall constitute a quorum for the transaction of all business.

ARTICLE X—AMENDMENTS

The Constitution may be amended by two-thirds vote of the active members present at any regular meeting.

ORDER OF BUSINESS AND BY-LAWS

The order of business in all regular meetings of the club shall be as follows:

1. Social half hour.
2. Call to order.
3. Song.
4. Reading minutes of previous meeting.
5. Report of special committees.
6. Report of standing committees.
7. Treasurer's report.
8. Unfinished business.
9. New business.
10. Special programme.
11. Discussion.
12. Adjournment.

1. The meeting shall be called to order so that the business routine may be disposed of and the special programme of the evening begun by 8:15 o'clock. This part of the programme, including the general discussions, shall not usually exceed one and one-fourth hours.

2. The chairman of the meeting may leave the chair in order to engage in discussion.
3. In speaking from the floor in the open discussion which follows the main address or in any other event, the parliamentary rules of addressing the chair, etc., shall be strictly followed.
4. Speeches from the floor are limited to five minutes and the time may be extended only by unanimous consent.
5. No speaker may have the floor a second time, unless all others who wish to speak have had an opportunity to do so.
6. Speeches from the floor must deal with the subject chosen for discussion.

LIST OF TOPICS FOR COMMUNITY MEETINGS

A suggested list of topics for consideration and discussion. Many others will occur to the programme committee who know the local situation. All matters for reports and discussions should be of a constructive nature and of special value to the entire neighborhood. The watchword in every undertaking and in each programme should be co-operation.

The following list of subjects may be used for community meetings:

1. The kinds of waste on the farm.
2. The kinds of waste in the home.
3. Value of neighborhood entertainments.
4. How to exterminate the typhoid or common house-fly.
5. Relation of the house-fly to contagious and infectious diseases.
6. The value of playgrounds for country children.
7. Women's clubs in the country.
8. How to make poultry pay on the farm.
9. Pure-bred versus scrub dairy cows.
10. Should Agriculture, Manual Training and Home Economics be taught in our school?
11. The Farmers' Institute.
12. Boys' and girls' clubs.
13. How best to use the Extension Department of the University.
14. The value of demonstration work in Agriculture and Home Economics.
15. The relation of water-supply to contagious diseases.
16. How to use the "State Free Travelling Library."
17. Things that every taxpayer should know about local government.
18. How to improve production in our community.
19. The problem of our roads.
20. The need for more social advantages in the country.

21. Why farmers move to the city.
22. Modern conveniences on the farm.
23. The business side of farming.
24. The products we can market best.

A SUGGESTIVE PROGRAMME FOR A COMMUNITY MEETING

Subject: "Reading Matter in the Home"

1. Music.
2. Paper—The Magazine I Like Best, and Why.
3. General Discussion.
4. Recitation.
5. Paper—What makes a good children's book, and where can it be found?
6. General Discussion.
7. Round table—
 - (a) The papers that should be in every home.
 - (b) Influence of an early reading habit.
 - (c) How to satisfy the love of adventure in boys' reading.
 - (d) Recent books on farm life that are worth while.
8. Music.

PROBLEMS IN APPLICATION

1. What steps could be taken in the district where you teach or some other similar district to establish a community organization?
2. What are the principal pitfalls encountered by such organizations and how may they best be avoided?
3. Review one of the bulletins of the U. S. Bureau of Education on the Community Centre.
4. Review the chapter on Play and Recreation in Country Schools in Raper's "Educational Hygiene."
5. Make up a list of the five best pamphlets and books on play and recreation for country people.
6. What could such an organization do for civil education?

BIBLIOGRAPHY

1. Curtis—"Play and Recreation for the Open Country." Ginn & Co.
2. Perry—"Wider Use of the School Plant." Charities Publication Committee, New York.

3. Foght—"The Rural Teacher and His Work," part III, chap. VI. Macmillan.
4. Bancroft—"Games for the Playground." Macmillan.
5. Parker—"Methods of Teaching in High School." Ginn & Co.
6. Stern—"Neighborhood Entertainments." Sturgis & Walton.
7. Ward—"The Social Centre." Appleton.
8. Jackson—"A Community Centre, What It Is and How to Organize It." Government Printing Office.
9. "Recreation Manual for Teachers." State Dept. of Public Instruction for Oregon.
10. Rapeer—"Teaching Elementary-School Subjects," chaps. I, XIX, XXI, XXII. Scribner.

CHAPTER XXI

THE DIFFICULTIES OF CONSOLIDATION

PRELIMINARY PROBLEMS

1. What are some of the reasons why the facts and promises of consolidation are not brought to the attention of many communities that would profit by it?
2. What are some of the faults in the methods of presenting this reform to rural communities?
3. What are some of the leading reasons for not acting on consolidation after the matter has been presented?
4. Give some of the arguments usually advanced against consolidation.
5. Name the points over which most care must be taken in consolidation to avoid complaints and reaction.

Source of Material Used.—In studying the problem suggested above an attempt has been made to learn what the leading rural leaders of to-day are thinking and saying about rural school consolidation. Accordingly, the State Superintendents of Public Instruction and the State Supervisors and Inspectors of Rural Schools have been requested, as the persons who would perhaps be best prepared to give opinions of value, to report on the consolidated school as they found it. The discussion which follows is based very largely upon the contents of the letters which these leaders were kind enough to write in response to a questionnaire.

Our first impression in going over the large number of letters received from these state leaders is that probably no single scheme or plan of consolidation of schools can be followed by all, or even by any very large number, of the states. It is a matter which depends upon the kind of school organization in a given state, the topography of

the country, the condition of public highways and of other means of transportation, the attitude of the people toward progress in general, their past experience with schools, and upon a number of other conditions peculiar to a given state or section of the country. If one should take a report of what one state, or what a group of states, is doing by way of consolidation and undertake to duplicate closely that system for his own state, he would probably fail in his undertaking. Consolidation of schools must be the result of years of study, invention, experimentation, and adaptation, on the home grounds. But, of course, the experiences of others are of incalculable value to the one who plans for the consolidation of schools, particularly so if plans are being laid upon state-wide proportions.

Four Fundamental Problems.—The reports from the several states are extremely interesting. Whether expressed or implied, a few points stand out boldly as constituting the fundamental problems of the consolidation of rural schools. They are (1) the conservatism and the prejudices of the people, (2) the transportation problem, (3) the added expense, and (4) the character of the teaching in this new type of public school.

From Massachusetts, the mother of the consolidated school, comes a summary by Mr. Francis G. Wadsworth, Agent of the State Board of Education:

DANGERS

- (a) Inadequate provisions for transportation.
- (b) The unsupervised noon hour.

DIFFICULTIES

- (a) Securing appropriations for new buildings.
- (b) Bad roads.
- (c) Finding competent drivers for barges.
- (d) Satisfying parents whose children are required to walk to meet the school barges.
- (e) Providing warm luncheons for children at the schools.

SHORTCOMINGS

(a) It takes the children away from home for a longer period of the day, and limits the working time of boys and girls on the home farm.

(b) It makes it difficult for parents to visit the school so as to become intimately acquainted with the work therein.

A moment's thought upon these statements will indicate the wide range of possible dangers, difficulties, and shortcomings of the rural consolidated school. That the arguments are not all on the positive side of the question is clear. But no scheme is without shortcomings.

State Superintendent Chas. A. Greathouse, of Indiana, where consolidation has been effected on a very large scale, has this to say: "The only real objection raised by the patrons is the matter of transportation, usually the fault of the township trustee in allowing too long a route. When this is adjusted, I think I can safely say there is very little difficulty."

Let us consider the four principal points stated above.

i. *The Conservatism and the Prejudices of the People.*—We do not mean to imply that these two terms are synonymous. They are, however, very closely linked together. In the first place, rural people are characteristically conservative. They require some time to think things out and reach new conclusions. The danger is that the rural leaders may be overambitious to get results quickly. To act, or to lead the people to act before public sentiment approves, will probably result in failure, or at least in disappointment. The possibility of going too fast, or of going too far, in a consolidation project constitutes a very serious danger of the consolidated school. A great many readjustments have had to be made and in some cases the consolidated-school buildings have actually been abandoned, and the little neighborhood schools again opened. Sometimes we literally make haste by going slowly.

Furthermore, one failure of this kind will be so adver-

tised for miles around that it becomes more difficult than ever to effect consolidation in other places. Unless public sentiment has been cultivated, as indicated above, the management of a new consolidated school is likely to experience great difficulty at first in "making good" with the people.

In the second place, the rural adult population have very strong prejudices. The minds of a good many of them are made up for all time. Things are thus and so, and they could not be otherwise. There will be found another group who are open to conviction, but who do not have very positive views upon such questions as the consolidation of schools. They await, with more or less indifference, for developments before making up their minds. And there is a third group, usually in the minority, who are strong advocates of consolidation and of every other progressive measure calculated to improve their schools and the community in general. The second group mentioned, the open-minded, hold the balance of public sentiment. The whole proposition will rise or fall in accordance with the way they make up their minds on this innovation suddenly sprung upon them by the last-named group, the leaders.

Any one who has had experience at first hand in promoting consolidation of schools will agree that there is an almost universal prejudice against giving up the neighborhood school. Several years ago in his "The State and The Farmer," Dean L. H. Bailey made the following comment upon this phase of consolidation:

The greatest difficulty in bringing about the consolidation of schools is a deep-seated prejudice against giving up the old school. This prejudice is usually not expressed in words. Often it is really unconscious to the person himself. Yet I wonder whether right here does not lie a fundamental and valid reason against the uniform consolidation of rural schools, a feeling that when the school leaves the locality something vital has gone out of the neighborhood. Local pride has been offended. Initiative has been removed one step farther away. The locality has lost something.

In December, 1916, Superintendent Edward Hyatt, of California, expressed the same idea in his report:

The principal dangers seem to be that the people do not willingly give up their little rural districts. It is a species of religion or patriotism to stand up for one's own school district and to combat its loss. This and the bad feeling growing out of it hinder the success of the consolidated school.

Matter for Serious Consideration.—Statements of this kind coming from authorities so eminent as are Dean Bailey and Superintendent Hyatt call for our most careful consideration of this aspect of the rural consolidated school. Some of our more ardent advocates of consolidation seem to think it almost unbelievable that persons can be so lacking in public spirit, in patriotism, and even in common sense, as to stand in the way of so fine a means of improving their educational facilities. As a matter of fact, most of these "standpatters" are absolutely honest in their convictions.

We should bear in mind that the consolidation of a group of country schools is a pretty radical change to be brought about in a comparatively short time. Since the earliest settlements, the children at any given time have attended the little neighborhood school. It required perhaps not over thirty minutes for the farthest ones to walk to or from the school. They carried their lunch-baskets with them. The little school and its routine work have been a fixed part of the community. Now, rather suddenly, the doors of the home school are closed. Wagons come along, pick up the children and drive them off from three to six miles to a strange school situated in another community. Instead of thirty minutes it may require from one to two hours to make the drive. The lunch-basket is often replaced at the school by the warm lunch, which the mother has no part in preparing. Up to this time the traditional course of study has prevailed. Now domestic

science, manual training, agriculture, commercial subjects, music, and drawing are studied, subjects which many of the parents do not know how to appreciate. It is perhaps the greatest and most sudden change that these small communities have ever experienced. Is it any wonder that the consolidation of schools meets with opposition from some of the people?

Furthermore, as Dean Bailey points out, the neighborhood may indeed be losing something valuable for all time. Unless the several neighborhoods whose schools are consolidated can also be consolidated into a correspondingly larger community, I think all will agree that each neighborhood will have lost something. But, even at best, there are likely to be a considerable number of families who are unable to take their places in this enlarged community. They will fail, for one reason or another, to adjust themselves to the new conditions which have been created by the consolidation of their schools. This failure of the people to adjust themselves is apt to harden their prejudices against the whole proposition and at the same time to stir them up to active opposition.

We should keep in mind also that prejudice against the consolidation of schools is just the same kind of thing that has always stood in the way of progress of whatsoever kind. It is peculiar neither to rural-school progress nor, for that matter, to the rural people. I believe President Eliot has been quoted as having said in effect that it took him the first ten years of his administration as President of Harvard University to win over the faculty of that institution to his programme for progress. It may be well also to recall in this connection that the first city superintendent in the United States was appointed *on trial* at Springfield, Mass., in 1849, and that after two years the office was abolished for the reason that it was believed to be a useless expense. Nearly all new inventions and discoveries have been scoffed at at first. Unless the conservatism and the

prejudices of the people are recognized and skilfully and patiently reckoned with, any new consolidated school is in great danger of becoming a failure.

2. *The Transportation Problem.*—The problem of transportation is perhaps the greatest difficulty of, and may result in the greatest danger to, the consolidated school. Doctor Thomas E. Finegan of the New York State Department of Education (now the State Superintendent of Public Instruction in Pennsylvania) says: "In my judgment the principal difficulty is the question of transportation." Superintendent W. D. Ross of Kansas says: "There is only one real difficulty in this state and this in the western part where it is sparsely settled, the districts there being very large; and any move to consolidate any number of districts or at least a sufficient number to make it economically worth while would be impossible, owing to the distance children would have to be transported."

What Superintendent Ross says of the western part of Kansas describes the transportation problem over a large area of the United States, particularly in mountainous states.

Superintendent H. C. Morrison of New Hampshire throws such a flood of light upon the consolidation of schools in New England that I have taken the liberty to quote at length from his letter under date of December 8, 1916:

I was an enthusiastic believer in that plan (consolidation with transportation) ten years ago, but as experience has accumulated it turns out to be feasible only in rare instances. You see nearly all of Massachusetts east of the Connecticut river, the southern part of New Hampshire, the western part of Maine, and practically all of Rhode Island and Connecticut have been settled for nearly three hundred years. The rural life of the region has gone through several phases which have resulted in creating one set of conditions at one time, subsequently revolutionizing those conditions and leaving a wake of abandoned farms in the trail; again establishing an entirely new set of conditions on the old, and so on. The result is that in a hilly country very much cut up by watercourses, we have public

highways running in every direction and farms so scattered that it is ordinarily pretty nearly impossible to collect children with the transportation system without great expense and without starting some of them to school very early in the morning. This is particularly true of nearly the whole of this state.

What we do find is this. Occasionally the topography of a region is such that a consolidated school can be established at a central village which is approached from all parts of the township by two or three radiating lines of highways, or sometimes the village is on a trunk line which is the only highway. Under these conditions two or three barges will pick up all the children in the outlying regions, bring them to the village in an hour or less, and carry them home with the same facility and expedition at the end of the day. There are a few cases in which this works very well, and in such cases the consolidated school is a much better solution of the rural-school problem than is the one-room schoolhouse. On the other hand, in the great majority of townships such a practice means hardship to the children. It means that the young people with growing families of children will move out of town, and do move out of town, and that others will not come in. Consequently the economic basis of the whole social fabric, including the school system, falls to pieces.

Furthermore, the transportation system under such conditions gets so complicated that it is beyond the capacity of the average local board of officers to manage. They easily fall into ways of paying parents for carrying their own children to school, and this often leads to the said parents holding up the town for what is substantially a rake-off. Furthermore, it must be remembered that the one-room school, in a wholesome and sanitary building, with a course of study adapted to the conditions, with a daily time-table arranged as it can very easily be arranged so as to be manageable, with a trained teacher in service, is a very much better, because a very much more flexible, institution than the so-called graded school, which is a city device with its lock-step and general overloading with system and rigidity.

So this department is advocating to-day, for the conditions in this state, the following plan: A thoroughly good one-room school within walking distance of as many children as possible, with a course of study which will keep the children there as long as is consistent with their continued progress, and a secondary school within driving distance of as many children as possible. We are now just beginning to work into an occasional one-room school an adaptation of the junior high school.

It ought to be said, however, that the principles which I have suggested above are very largely dependent upon the peculiar topog-

raphy of this region and the peculiar conditions of its settlement. I should expect to find somewhat similar conditions in parts of your state, but perhaps not. Certainly in many parts of the west, with its flat country, rectangular system of highways and scattered population, I cannot see how they could manage schools effectively in any other way than through the device of the consolidated school and a transportation system.

Superintendent Francis G. Blair of Illinois has been good enough to write also at length upon the situation relative to consolidation in his state and my readers will welcome his wise counsel:

The arguments offered against consolidation have usually taken substantially the following forms:

(1) Consolidation, to be effective, requires that children be transported in wagons. This presupposes a condition of roads which will permit of transportation throughout the school year. In Illinois, and especially through the black belt, the country roads are practically impassable for loaded wagons during about two months of the school year. With the coming of hard roads, this objection would entirely disappear.

(2) The fact that the transporting wagon does not come to the door of the homes of the children, but picks up the children at certain points along the main highway, does not impress the parents favorably. They feel that it will require as much care on their part to dress their children and send them to a certain point on the highway as it would to dress them so that they may walk to the near-by school. This objection, while not a serious one, has a great deal to do in determining the attitude of the parents.

(3) A great many parents who have had no experience whatever in the transporting of children in wagons see all sorts of dangers in such an arrangement. They know how difficult it is for the teacher to control the children in the schoolroom. They cannot understand how the driver of a wagon can control a group of those children under such circumstances as will obtain in a wagon travelling along the country road. These fears can only be allayed by the presentation of a sufficient amount of evidence that no serious disorders arise out of this plan.

My own belief is, that wherever the people of a large community have become conscious of their community interests and community needs and are sufficiently committed to a community programme to

give assurance of success, in such a community a consolidated school is not only possible, but desirable. Those who would use the consolidated school as an instrument for community solidarity have much on their side. The serious objection to it is, that there must be a certain amount of concord before the school can be established, and a very great degree of it in order that the school may be continued.

Misconception a Factor.—To be sure, a great many objections to transportation are raised that have their existence only in the imaginations of the people, particularly of the mothers. For example, mothers wonder what would become of their children if they should fall ill while so far from home. Nobody will blame a mother for feeling such anxiety as this about her children. Of course, in the best managed consolidated schools provisions are made for the care of any who may fall ill while at school, and usually it is possible for the driver to take such pupils home immediately, with less danger than if a sick child should undertake to walk home from a school a half-mile away. But the mother cannot at first see just how this could be possible. She is especially anxious about her children, if she does not happen to know, and have confidence in, the principal and teachers of the school, and the driver of the wagon.

In the colder climates parents fear that their children will suffer from the cold while in transit, or while waiting for the wagon or bus. And, indeed, unless proper precautions are taken such fear may be well founded. There are, of course, suitable devices for warming and ventilating the conveyances, and where these devices are installed there can be no serious danger to the children's health, certainly not so much danger as would be the case where the children walk muddy, snowy roads, or trudge through the rain. Nevertheless, it is not an easy matter to convince parents that this is so. And suitable little storm protectors may be built with a few boards at the end of the customary lane where the children wait for the wagon to appear. How-

ever, it has been found that such vehicles seldom vary more than five minutes from schedule, much less time than it would take to trudge to the abandoned one-room school over muddy or snowy roads through sleet and rain.

The attempt to transport children too far is another serious danger of the transportation of pupils. In a level country, where roads are good enough to transport by means of the auto-bus, fifteen or twenty miles may not be too far to transport the children. But where hills and ravines have to be crossed, and where wagons or vans have to be drawn by horses or mules, three or four miles may really be a pretty long route. The late Doctor N. C. Schaeffer of Pennsylvania stated: "Auto-vans should bring the children to school within an hour after they leave home. The plan does not work well when children must leave home before daybreak and return home after dark." I am sure we all agree with Doctor Schaeffer. And no one can fairly blame parents for objecting to any plan that puts so much hardship upon the mother as getting the children ready to start to school as early as that. Furthermore, under these conditions the children are unable to help their parents in the least with the chores about the home.

Bad Roads a Bar.—I have referred only indirectly to perhaps the most serious difficulty of all, namely, bad roads. Transportation cannot be successfully effected except by trolley or railroad, unless the public highways are in fairly good condition. They may not necessarily be hard roads, but they must, at any rate, be passable with a loaded wagon. I am convinced that a great many mistakes have been made by undertaking to transport children over almost impassable roads. Consolidation projects are usually boosted at the time of year when the roads are at their best, with the result that when winter comes on and the roads get at their worst the troubles begin in earnest, and the plan is then laid open to serious criticism. It has been found that consolidation of schools helps to promote the improvement

of the roads, and doubtless there are many such cases on record, but if one is charged with the responsibility of a consolidation project, he would prefer to have the roads in fairly good condition before the consolidation took place. Afterward, consolidation could be made a great means of improving them still further.

Pupils' Conduct on the Road.—Fear of bad conduct among the children while being transported is another difficulty to be met. Parents are not willing at first to repose the same confidence in the driver of the conveyance that they have been accustomed to place in the teachers. And unless boards of education are very careful in selecting drivers there may be sufficient grounds to justify the fears that naturally arise in the minds of parents. This misgiving is the more plausible because of the existence of different classes, even of different races, in almost every community. Some parents do not want their children to be so closely associated with certain other children as travelling together in a closed wagon or van would make necessary.

I mention these contingencies not because I believe that many of them may not be successfully met, particularly if sufficient time be given, but because I regard them as some of the real prejudices against the consolidated school. To many persons they may seem, indeed, to be minor difficulties. But I would remind them that these are precisely the points that parents are most likely to pick out as the most serious obstacles. For they think most seriously of the things which touch them personally through their children, and in the homes. They are points which must not be treated lightly, or with indifference. The transportation of pupils, I repeat, may present the greatest difficulties to be met by the consolidated school.

3. *The Added Expense.*—The increased cost of the consolidated school over the one-teacher schools is another consideration of serious danger to the success of the rural

consolidated school. In almost every community there are a few citizens who object strenuously to any proposition which would probably increase their taxes. These persons may be outvoted or overruled in the decision of a community to consolidate its schools, but they stand ready at all times to "strike back" at the majority by finding fault with the consolidation plan. This attitude of the minority toward the increase in tax rates for the support of the school, no matter what the increased advantages purchased, is a constant source of danger to any consolidation project. Persons who take this attitude must be reasoned with, and this can be done only by finding ways of convincing them that their money is really yielding them and the community greater returns in terms of educational facilities. And this cannot be done by merely telling them of the advantages of the new over the old. They must be shown. Pictures, stereopticon views, moving pictures, and the like can, of course, add to the concreteness of the propaganda. The U. S. Bureau of Education will lend slides for a stereopticon. Later, their interest must be aroused by deeds, not by preachments.

Consolidated Schools Generally More Expensive.—I am assuming, of course, that the consolidated school is going to cost more than did the one-teacher schools which have not been consolidated. My position on this question may be open to question. For example, Major A. C. Monahan, in his bulletin on "Consolidation of Rural Schools," published by the United States Bureau of Education in 1914, puts it this way:

Experience in consolidated schools proves conclusively that the cost of education per child per day in such schools as a rule is much less than in one-teacher schools, provided that largely increased salaries are not paid to the teachers in the consolidated schools. The consolidated school may be, and usually is, made more expensive, due to the fact that consolidation follows an educational awakening which demands not so much centralization of buildings as the educational ad-

vantages made possible through centralization: Longer terms, better equipment, trained teachers, supervising principals, and the addition of high-school grades.

But it is evident that it is necessary to pay higher salaries in the consolidated school if we would have better teachers, and that if the consolidated school is going to do all the things we promise, it will at least have "longer terms, better equipment, trained teachers, supervising principals." For unless such an awakening as Major Monahan describes does follow or accompany consolidation, it would be doubtful whether the consolidation would be of itself worth the trouble and expense which are required to establish and maintain it.

In the same bulletin Major Monahan reproduces statistics taken from the report of the State Superintendent of Indiana for 1912, from which he deduces the following:

The cost of schooling per child, when the expense of transportation is not included, is \$2.42 greater in the district schools than in the consolidated schools, showing that the district schools are not as economical, as far as the cost of education itself is concerned, as the consolidated schools. When the transportation is included, however, the consolidated schools cost \$12.81 more than the district schools.

This point is not entirely conclusive. Of course, the actual teaching would cost more for sixty children in six separate schools than it would if these sixty children were taught by two teachers in a two-room consolidated school. But if consolidation means also transportation of pupils, then we must include the item of transportation in our budget of expenses. Likewise, we must include the items of the teaching of special subjects, higher salaries for trained teachers, modern equipment, and all things else that go with a modern consolidated school. As to equipment, modern practice demands a well with a force pump, basement, pressure tank, indoor toilets, drinking fountains, cesspool or septic tank, etc., at every school. To make

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really modern the single-room schools will cost far more than one new consolidated building.

My conclusion is, therefore, that the consolidated school will cost more than the present one-teacher schools left as they are. We shall then have to prove to the people that our new plan is better than the old. This we can do (*a*) by everlasting "making good" with the children themselves, and (*b*) by making the consolidated school a social centre for the whole community.

Making good with the children is discussed in the following paragraphs, and since a separate chapter of this book is devoted to the social and recreational activities of the consolidated rural school, we shall let this consideration pass at this time with a mere statement.

4. *The Character of the Teaching.*—There seems to be a tendency among many to criticise the character of the teaching in many consolidated schools. The consolidated school is essentially a rural school. Therefore, its teaching should be closely correlated with rural life, particularly with the life of the immediate community. Furthermore, if the teaching be correlated, then the teachers must have knowledge and appreciation not only of the philosophy of rural life and its conditions, but also of the rural people themselves, their outlook upon life and upon the world, their attitude toward the city, their habits of thought, their traditions, their occupations, and their prejudices. The consolidated school is not merely a city-graded school set up in the country, but a new and separate institution, having new and different opportunities, responsibilities, and demands.

Doctor Thos. E. Finegan of Pennsylvania expresses this sentiment forcibly in a letter dated December 11, 1916:

Simply consolidating schools does not make good schools. If schools are consolidated, qualified teachers must be employed, and the work of the school must be adapted to the needs of the community. Our experience is that when the farmers realize that the school is an

asset to the farm, that it is preparing the boys and girls for farm work and home work, and that the school is actually related to the life and work of the farm, improving rural conditions, increasing the bulk of the farm crops, and rendering many other benefits, the school will be well supported. However, if poor teachers are employed, if the same old courses of study are continued, and if all the sins and shortcomings of the one-room school are continued in the larger school, on an enlarged plan, the school will be properly condemned.

Superintendent C. H. Lugg of South Dakota expresses the same sentiment in his letter of December 13, 1916:

This school should be distinctively a rural school dealing with rural motives, rural conditions, rural topics, and rural life in general. There is danger that much of the good work the school ought to do will be spoiled by the introduction of city ideals, city motives, and commercial training for which the children are not yet prepared.

The chief difficulty lies in getting the proper equipment to begin with, and then in securing teachers trained for, and experienced in, rural-school work.

The principal shortcoming is an outgrowth of both the conditions just mentioned. It is the introduction of city ideals under the guise of culture, while instead of culture, the thing introduced is an artificial glamour that does not really exist in the city, but which tends to render the country pupil dissatisfied with country life, and to make him blind to the great opportunities which lie round about that life, opportunities for culture of no less degree than the city can offer, opportunities for enterprise that excel anything the city can offer, opportunities for real living which the city will never know.

Mr. J. A. Woodruff, State Inspector of Rural Schools of Iowa, says:

We are meeting with some difficulty in securing a sufficient number of men who seem to have the proper view-point. There seems to be a danger that young men who have had their preparation along classical lines will emphasize this line of work to the detriment of subjects usually classed as practical.

These statements, coming from such authorities as they do, are significant to those of us who have the responsibility of directing the work and general character of the

THE DIFFICULTIES OF CONSOLIDATION

consolidated school. In general, it seems that unless consolidated school can be made a different school from city ward school, thoroughly organized to achieve a different purpose, then we had better not abandon the little rural school. And unless the teachers have the view-point of the rural people among whom they work, or unless they can acquire this view-point quickly, then the consolidated rural school will probably be in effect a failure, even though it may continue to work indefinitely.

Dearth of Trained Rural Leaders a Handicap.—Perhaps the most serious difficulty of the consolidated schools, so far as the character of the work is concerned, is the dearth of trained rural leaders to put in charge of them. If only the principals of these schools were properly trained, this difficulty would be very largely removed. For the principal has an opportunity to train the other teachers, or to eliminate and select until he shall have built up a strong corps of teachers who understand the very hearts of the country people, and the soul of the school itself. But if there be no leader of this kind, who can direct and redirect the policy and work of the school in accordance with its responsibilities, then the situation is pretty nearly hopeless.

The departments of education in State universities and the State normal schools have a grave responsibility at this point, which, I think we must admit, is not met in every instance. We may not hope that all of the teachers can be trained in universities and normal schools. But we may well expect that these institutions will give a little more attention to the training of rural leaders, who may in turn train the teachers under their direction, and at the same time lead the people of the rural communities to a better understanding both of the conditions surrounding them and of the opportunities that are theirs, if only they know how to take advantage of them. However, it is encouraging to note that more than formerly these State institutions are

undertaking to do just this thing, and, indeed, with fine results.

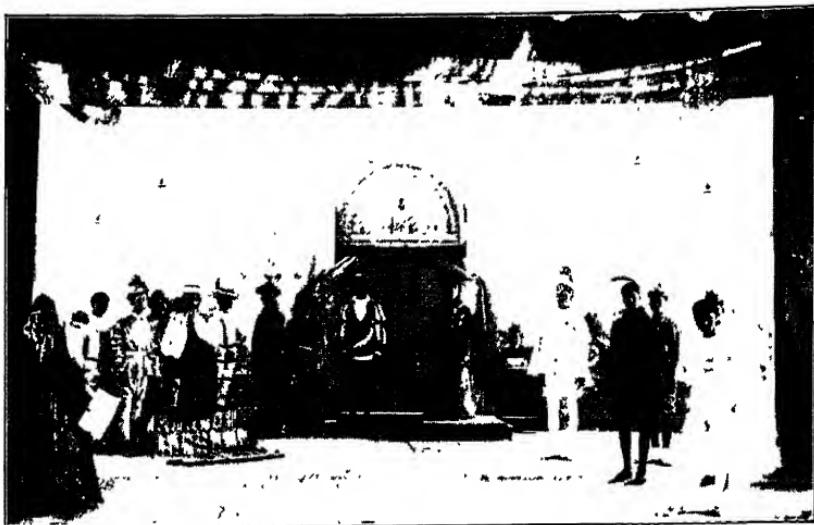
As has already been stated, the consolidated school is essentially a rural institution. Its primary aim is to train for country living. But there seems to be a sentiment among many rural life leaders that in many instances this aim is not followed; that instead of training for country life, the consolidated school trains away from the country to the city. This sentiment is expressed by State Rural School Inspector W. S. Dakin, of Connecticut, in the following statement of the dangers, difficulties, and shortcomings of the consolidated school:

Tendency to arouse love for excitement and stimulate interests that draw children from the home toward the town and city, this particularly true of upper grade and high-school students.

Tendency to cause concentration of homes in the community. The established policy of transportation is liable to result in a movement from back farms to those on the transportation lines or actually in the central village, and discouragement of purchase of farms where children will have long distances to travel.

I believe that in this latter point, the tendency toward concentration, lies one of the most serious objections to the consolidation of rural schools. It touches on a matter of vital economic and political significance. We lament the growth of city and town life, and yet by the rigid enforcement of state-wide compulsory attendance laws, and the transportation of children to large centres through consolidation of schools, we are quietly but most assuredly depopulating country districts, drawing in the outsiders who might and should remain in the rural districts.

The policy which induces the railroad to run lines into open country as a preparation for settlement might well be followed by state school systems through the establishment in remote districts of excellent, well-equipped schools, these to be placed not according to the actual enrollment at the present time, but according to the general economic possibilities of the section. Only in that way will people ambitious for the welfare of their children be induced to occupy lands remote from live cities and villages. We have brought to them the rural free delivery and the telephone, but have taken away a highly-prized privilege, good local schools.



Students in costumes for a play which they produced in connection with their graduation exercises, Manila, P. I.



Float representing the San Andres primary school in the floral parade, Philippine carnival, Manila, 1915. Freed from many hampering traditions rural education in the Philippines has made great progress

The Little Country School Still Has Friends.—There is danger also of attaching too much importance to the consolidated school as compared with the one-teacher schools. I think very few students of rural-school organization fail to recognize that the consolidated school, if properly directed, is a better school than the average one-teacher school, if for no other reason than the better facilities for teaching. But since the advent of the consolidated school, the one-teacher school has lost caste. We are apt to do and say things to discredit it. As a result, the people come to believe that their little school doesn't amount to much. Teachers do not like to teach in a school which has fallen into disrepute. But this type of school still has many friends, and if we say too harsh things about it in our praise of the consolidated school, these friends of their little school may "strike back" hard at the newer type of school.

Furthermore, we must be mindful that the little country schools far outnumber the consolidated schools, and will continue to do so for many years to come. There are thousands of one-teacher schools where there are only hundreds of consolidated schools. So long as the proportion is so largely in favor of the little country schools, it behooves us as leaders to have due regard for its rights and true recognition both of its achievements and of its possibilities.

The Small Graded School.—Up to this point we have constantly had in mind the consolidated school which has been composed of several one-teacher country schools, whose children are now being transported to the central school. There is another type of consolidated school which, in mountainous sections and in thickly settled communities, may more nearly meet the real needs than the larger school where transportation is provided. This is the graded school of from two to four teachers, where all the pupils are so situated that they can walk to the central school with a distance of not over about two miles. Some boards of education have been trying to accommodate every family in their

districts, and have gone on building one-teacher schools almost without number. Now we understand, and the people pretty well understand, that there is a decided advantage in so organizing a school that one teacher shall have not over three grades. It is comparatively easy for rural people to understand what is meant when one explains that no teacher can teach well the eight grades of the elementary school, and that the work can be done very much better by two, three, or four teachers, each having from two to three grades. It is also easy for them to see that one or two miles is not too far for the youngsters to walk. This proposition appeals to the people very much more strongly than the proposition of establishing a large consolidated school and hauling the children from three to five or six miles at public expense.

Under such conditions it may also be possible to have the older children go to a central school for upper-grade work and to let the smaller children go to the school of their respective neighborhoods. In this way the advantages of a graded school will be gained and no hardships will be inflicted upon the little folks who are yet unable to walk to the central school. In Wayne County, West Virginia, for example, by petitioning boards of education the people have secured the consolidation of sixty of their one-teacher country schools into twenty-eight of these small graded schools. And there are in the hands of some of the boards of education petitions which have been waiting their turn for as many as three or four years. The demand comes from the people themselves, and the boards of education have some hard times explaining why they find it necessary to wait a year or two before the boards can grant their petitions. A large number of the difficulties of the larger type of consolidated school are not found in connection either with the establishing or with the maintenance of these smaller graded schools. Perhaps a very good way to effect the more complete form of consolidation is by beginning with the small graded school.

Perhaps our greatest need in rural education is expert and sufficient supervision of teachers. In the consolidated school the principal has this responsibility. But, as shown in Baltimore County, Md., sufficient expert supervision can be had without consolidation.

RÉSUMÉ

Stated briefly, the practicability of the consolidated rural school lies in its adaptation to local, or at least sectional, conditions.

That this type of rural school has its shortcomings appears to be the sentiment of our rural leaders throughout the country.

Clearly it has also many dangers in its path, and many difficulties to be met.

The ability to overcome its shortcomings, once it is established, depends upon (1) whether it is wise to consolidate in the first place, (2) whether the administration of its affairs is of the highest order, (3) whether its teachers are persons inspired with the spirit of the country and prepared for this peculiar kind of leadership, and (4) whether the supervision and leadership which they get is of a high order.

The consolidation idea is good. If the idea can be successfully put into practice the country youth who come under its influence will have such an educational opportunity as perhaps no other type of school offers. The following chapter takes up some of the leading constructive features which will make of the consolidated school a real rural-education plant.

BIBLIOGRAPHY

Betts and Hall—"Better Rural Schools," part IV. The Bobbs-Merrill Co.

Brogden—"Consolidation of Schools and Transportation of Pupils." Department of Education, Raleigh, N. C.

Burnham—"Two Types of Rural Schools." Teachers' College, Columbia University.

Foght—"The American Rural School," part XV. The Macmillan Company.

Knorr—"Consolidated Rural Schools and Organization of a County System." U. S. Bureau of Education, No. 232.

Monahan—"Consolidation of Schools and Transportation of Pupils at Public Expense." U. S. Bureau of Education, No. 30.

CHAPTER XXII

THE NEW CONSOLIDATED SCHOOL

I. THE FUTURE OF THE CONSOLIDATED SCHOOL

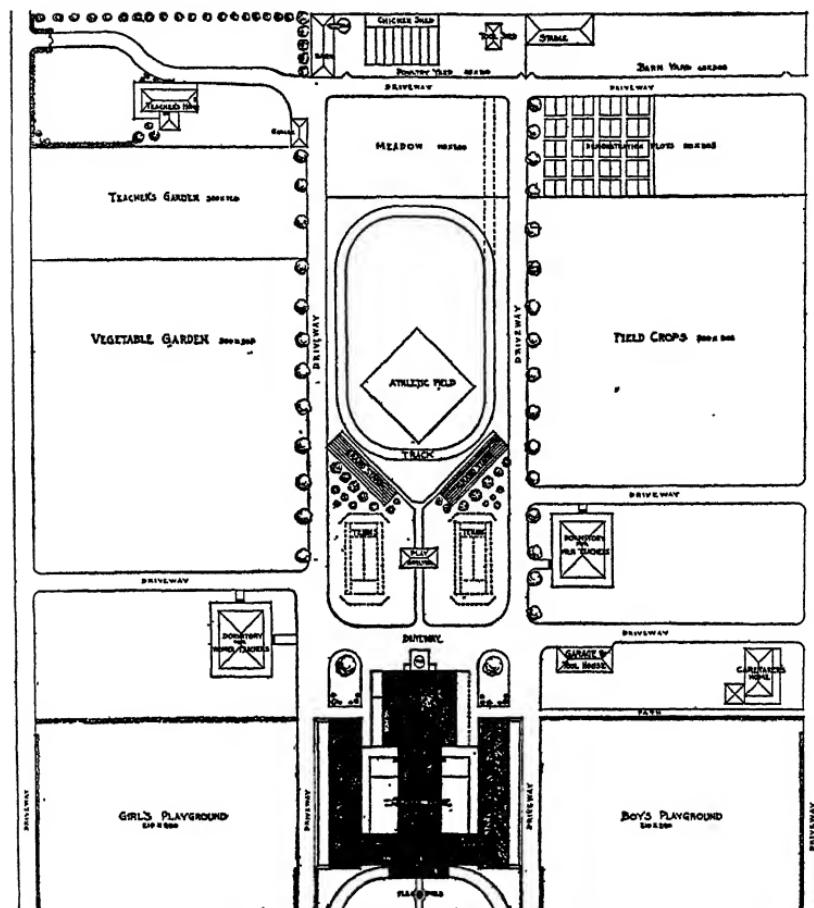
The future of the consolidated school is very bright. It is rapidly winning its way into the hearts of rural people, and it is each year adding considerably to its efficiency. A pioneer movement must unfortunately present to people for their approval only the primary stages of a new development. The first automobiles were not highly attractive and the first consolidated schools were by no means as efficient and broad in their rural social service as such schools will in fifty years become. Nine million dollars or more should annually be spent by the federal government, and the amounts should be more than equalled by the state governments in establishing model and experimental consolidated schools in various parts of the country, from sea to sea. From carefully directed experiment, wide and thorough study of the movement, and from a high class of inventive genius in the work, we should in a few decades elaborate a type of consolidated rural school that would be even more serviceable than the best city schools. The rural school need prepare for but one principal vocation in a community, while the city must prepare for very many. Perhaps the ideal American school to be shown foreign visitors of the future will be our rural consolidated school.

Roads.—Such a school needs good roads, and it will, in turn, promote good roads. If the school bus has to miss reaching the school a week or more each school year because of the bad roads, the roads are bound to be improved. The consolidated-school centre makes possible

effective public discussion and leadership in getting better highways. If the snow-drifts bother, snow fences such as are used along railways will be constructed. If deep mud stalls the machine, the civics classes will have before them a good practical problem. Some one has recommended a kind of military training, without the "gun-toting" features, of all boys of high-school age, which will set such young huskies at healthful labor for the public good. From one to three months camping out and working in the construction of good roads each year might be a part of the programme with benefit to all. Great national highways and the principal arteries of transportation might be developed as by-products of such military, physical, and civic education. Let not the lack of the best roads too much retard the consolidated school.

The consolidated-school plant will be worthy of the large community which it serves. It will draw its support from generous State, county, and local funds. Perhaps federal aid may be also obtained. The assessed valuation of the community territory will be little less than a half million dollars, and the school population may confidently be expected to increase far beyond the present. When we see populations abroad as great as our own country living in areas little larger than one or two of our States, we may expect before long a doubling and a trebling of our present hundred million population. Because of the growing high cost of farm products, and the great proportion of city dwellers, over half of the population, the rural regions, will get their full share of this increase of population. As roads and automobiles improve, the distances pupils can be hauled will be increased and thus double forces will increase consolidated-school attendance.

The Farm.—There will be a farm at the school (1) to furnish a definite means of keeping the principal and teachers in close touch with farm problems, (2) to provide a desirable addition to what is always the school-teacher's low



Plan of a twenty-acre site

salary, (3) to retain a more permanent teaching force, (4) to provide for a demonstration farm and home to show what can be done in the country, (5) to provide for the equivalent of an agricultural experiment station, (6) to provide homes for the principal, teachers, janitor, and perhaps other workers, such as those who drive the cars and work on the

farm, (7) to provide school gardening and other manual labor for the children, (8) to provide an athletic, field-day, picnic, and recreation centre for the community, (9) to provide grounds for a community fair such as the county fairs in some sections of the country, and (10) to provide a central meeting-place for both the people of the village trading-centre and the farmers, whose interests are mutual, and who greatly need such a place and excuse for getting together in a wholesome, interested, co-operative manner.

The school-building will probably be a one-story structure, with a flat roof, partly lighted from above. It will be located on the front part of the farm, with its long axis running north and south to provide east and west lighting for the classrooms. Such a structure can be added to at will, and has many other advantages in cost, construction, and adaptability. Sooner or later it will have a good auditorium, a first-class gymnasium with showers and a swimming-pool, a good library, study halls probably in connection with the library, a room for a permanent exhibit of farm products, agricultural, botanical, chemical, and physical laboratories, domestic science and manual-training departments, teachers' retiring-rooms, principal's office, regular classrooms for elementary and high-school pupils, both groups on the six-six plan, a medical or health room for the school nurse and county supervisor of health and physical development, a lunch-room, motion-picture apparatus, and good stage in the auditorium, and other features as good as those provided as a matter of course in cities.

The Curriculum.—The studies will not be selected because some European school used them during the last century, nor because a conservative or reactionary college requires them for entrance. The passage from the high school to the State higher institutions will be as simple and sensible as the passage from the six-year elementary school to the six-year high school. Neither will the programme of studies be a cheap imitation of city-school curricula.

The consolidated school is to win a distinctness and self-reliance that is based on a clear understanding of its special function and of how its work should be done. Its text-books will be written by successful teachers in such schools who have for a number of years brought together and psychologically arranged subject-matter that they have proved hits the mark of the five great aims of rural education. These texts will provide for much local adaptation and selection of community problems that especially need solution. The courses of study will be full of suggestions and methods of accomplishing and measuring results. It will not be a bare, skeleton outline of dead subject-matter. In administering the course no traditional and vague aims such as formal discipline, culture, scholarship, and other unanalyzed aims either psychologically or sociologically misleading will govern. Real culture of real rural people will be secured, but it will not be divorced from the most technical and exacting social efficiency in the rural environment. Neither will it attempt to lead good prospective farmers and farmers' wives away from the country by a schooling idealizing only the overcrowded professions and the rather illusory successes of city life. It will be a curriculum "of the people, for the people, and by the people."

The drivers of the auto-busses or horse hacks will be competent, dependable men or women who will, in many cases, be permanently connected with the school. There will be a good large garage for all the busses, hacks, horses, buggies, bicycles, and motorcycles used. We shall not, until the revised edition of this volume appears, suggest a hangar for aeroplanes. No machine of man is, however, being more rapidly developed to-day, and the aeroplane is not obstructed by "bad roads and high hills." The lunch-room in connection with the home-economics department of the school will be used by most of the pupils and teachers for the midday meal. The electricity used will be produced in the building if it is not available outside. The heating

plant of the building will be somewhat separated from the main building for greater safety from fires. The building will be fireproof in construction because of the usual total absence of a convenient or satisfactory fire department in the small town. About two buildings destroyed by fire a day is our present rate. Water will be pumped from deep wells to a reservoir, and plenty of water will be furnished all parts of the building for drinking-fountains, modern toilets, cooking, agriculture and botany, drawing, and other purposes.

The Teachers.—Here, with principal and teachers who are normal-school and college graduates, thoroughly in sympathy with and understanding farm life, happy, permanent, and satisfied in their work, with school directors and patrons who give encouragement rather than knocks, the great efficiencies demanded by modern democracy will begin to be developed for the first time in the history of education. A nation of healthy, happy people, efficient in their vocations, joyous in their avocations, progressive and skilled in their civic relations, and filled with the social-service spirit, will be the natural output of the consolidated school of the future.

To emphasize our previous stress of the importance of a suitable school plant we add here in closing a farewell word on:

II. THE ONE-STORY SCHOOL

As previously suggested, the consolidated rural-school building that is thoroughly adapted to its purposes and environment will probably be a one-story structure. The sixteen principles or "standards" which have been set up in Chapter IX for such a school, combined with present theories of lighting, ventilation, class management, and child hygiene, point inevitably, it seems, to the one-story type as the best solution. Up to the present, most of the

one-story school-buildings of any considerable size have been erected in towns and cities where the cost of the land is a deterrent factor, and where the building and playground must in most cases conform to the shape and narrow confines of a city block. In numerous instances not even a full block (around 300 feet square) is acquired for both building and playground. Nearly all the leading school architects have made their inventions within such limitations, and their buildings, although very suggestive, are practically never suitable for rural conditions.

Out in the open country or near a rural village or town where land is not divided into blocks, and where the land cost is relatively a minor matter, the one-story school-building can grow naturally into the form best calculated to meet the many requirements of twentieth-century rural hygiene and rural education. The best one-story schools so far erected in cities have many points of superiority over the higher buildings with basements. But if a one-story building with proposed extensions robs children of needed playground space, the city may well use the two-story-with-basement type. If one will examine critically a number of the best one-story buildings in cities or the plans which are published, he will note a more crowded-together structure than is desirable for the best ventilation by natural means. And natural means of ventilation for a number of reasons are, and will be, used much of the year in most schools, especially in mild, warm, and summer weather. A country consolidated school will, at the least, use its auditorium once a week for community gatherings throughout the summer. It would not be good economy to start the fans running for the building or the assembly-room alone if this expense could be avoided by wise provisions in building plans.

In these one-story buildings in cities, the auditorium-gymnasium wing is usually built up against the corridors of the end wings of the prevalent E-type building. This construction cuts this middle wing off from exposure to the

breeze, except above the level of the classrooms, and means, when fans are not running, dead air and a stagnation of ventilation. For a community motion-picture or other meeting, in the spring and summer especially, this plan would be bad, resulting in all the evils of "stuffy rooms." Some of these country buildings are used, as they should be, for community, non-sectarian ethical, social, and religious meetings on Sunday throughout the year, as described in Chapter XII. In the South and Far West it is especially necessary to secure at all times free cross-ventilation, and even with this, overhead, large-bladed fans in constant motion are quite frequently needed. In the tropics they are indispensable for effective educational work.

As permanent fixtures in warm climates, the writer has seen the possible beneficent influence of auditorium meetings of many kinds ruined by surrounding this middle wing on three sides with a two-story structure even as far away as forty feet, leaving a considerable *patio* on either side. Were it not for the severe winters of many of our States, and for the fact that school boards are beginning to show hygienic good sense in installing and running fans, either local for each room or one for the entire building, in mild and warm weather, it would, indeed, be a good plan to get the auditorium-gymnasium-library-lunchroom wing out entirely free from any obstructions to the natural ventilating forces in devising a common, standard type of building. Even though the auditorium group is two stories in height, and the upper part of the high rooms is above the rest of the structure, this is not sufficient. Neither is a narrow *patio*, or court, on either side enough. Probably not less than thirty to forty feet of open space, measuring from the inside corridors to the central wing of the E type, on either side, will be found necessary with one-story classrooms. An alternative type of building would be one in the shape of the letter U, with the auditorium group making the junction along the front between the two end wings of

classrooms. How to make this architecturally attractive might be somewhat of a problem, but it can be solved.

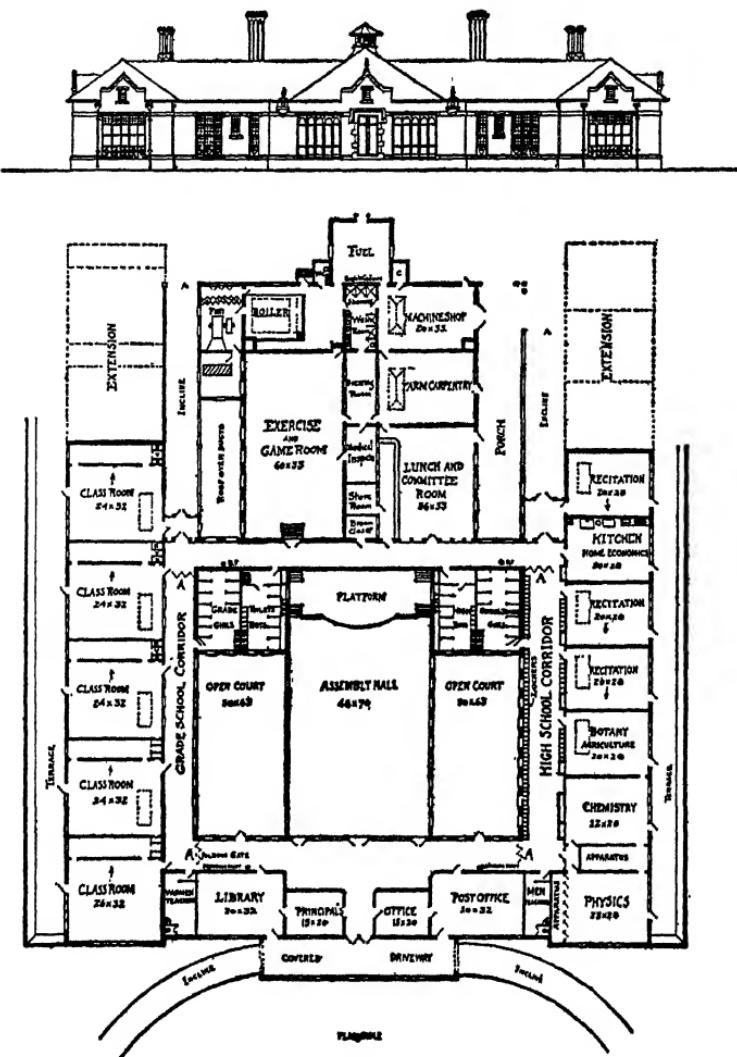
The single row of classrooms, flanked by a corridor which may, if necessary, be enclosed in glass in severe weather, and left quite open like an ordinary porch with colonnade the remainder of the year, is desirable largely for ventilation reasons, although it has its educational advantages. The ordinary building with two parallel rows of classrooms and a corridor between, lacks the means of cross-ventilation, especially when there are no windows opening from classrooms into the hall. In such a building it is highly desirable to have above the blackboards, under easy control by teachers, a row of single-sash windows opening into the corridor. In many cases it has been found desirable to cut such windows through these walls after buildings conforming to the old standard of unilateral lighting (and ventilation) have been erected. We have contended in the *American School Board Journal*, *The American Journal of School Hygiene*, and elsewhere for some time that unilateral ventilation is, for much of the year, in the typical school, exceedingly poor ventilation, since it does not provide for circulation by cross-currents of air. In most unilaterally lighted schools there are great dead-air spaces in that third of each room at the rear and right of pupils as seated. Even healthy, vigorous children should not be compelled to sit in such stagnant, "stuffy" air. In many cases it will be found that teachers have more or less vaguely sensed this condition, and have adjusted pupils to it. In many cases the pupils in this third of the room are occasionally blamed for listlessness or other symptoms of bad ventilation when they would show no such symptoms if changed to the front of the room where the windows on one side and the door on the right front leading to the hall make a cross-current of air. Teachers should demand windows above the blackboard on the hall side under such conditions. If the unilateral-lighting fad which has been so dogmatically

standardized by administrators and theorists more efficient in issuing edicts and "standards" than in doing constructive thinking and inventing must be followed, a second door should also be added opening into the corridor near the rear of the room in order to save the health of pupils much of each year when fans are not running. One door near the front with windows above the right-hand blackboard would, for many reasons of hygiene and class management, be preferable. With such high windows and with both windows and a door on the left of pupils we have the best features of an open-air school.

III. ADVANTAGES AND SPECIAL FEATURES

Some of the principal advantages and special features of the one-story consolidated school may here, for brevity, be stated numerically. Only the leading features will be noted which apply especially to the consolidated rural school. The matter has been dealt with briefly in Chapter IX. The accompanying floor plan is based on these principles, and would, if ably followed and adopted, to a large extent bring about the following advantages and conditions:

1. *Greater safety from fire and panic* is provided than in buildings with two or more stories and basements. In the country, without skilled fire-fighting agencies close at hand, this precaution is fundamental. All walls and floors can easily be made fireproof. No space is left for wood construction or combustibles below the children, since there is no basement, and the main floors may be made of concrete on a cinder or other filling. In classrooms this concrete floor may by proper rearrangements be covered with ordinary wooden flooring. Each classroom has exits directly to the playground (a) through a door on the left of the pupils as seated, (b) through the door and corridor into the court on the right, or (c) out of the windows scarcely



CONSOLIDATED RURAL SCHOOL BUILDING AND COMMUNITY CENTER
By Louis W. Reeder, Ph.D. Washington, D.C. Saenger Ashford, Architect

four feet above the ground on the left. Such a sufficiency of exits would meet the most stringent fire regulations of cities, and would serve several other functions besides. The short jump from the windows should be without injurious effects to most country children, especially where effective gymnasium training has contributed to agility, hardihood, and courage in jumping such a slight distance. Plentiful exits from the assembly wing can also easily be provided, opening into the courts on either side.

The heating plant would be in a separate fireproof room at the rear of the building, or separated, as in the writer's floor plan presented later.

There is no good reason why most such schools should not be built almost entirely of concrete. Farm people to-day need constant building object-lessons in the use of this indispensable ally of the progressive agriculturist. A standard type of building such as is here suggested could be designed, steel or cast plates made for it, and these moved to different parts of a State whenever such a building was to be erected. The concrete could be poured into the moulds formed with such plates, and the latter would be practically indestructible. Sand, gravel, and rock for crushing are usually convenient, either on or beneath the surface of the ground. In any event, complete plans and specifications for such model, indestructible buildings should be available free of charge at the office of the State Superintendent of Education.

2. *Overhead lighting* can be provided for all classrooms. Devices for such lighting have been perfected until it is now safe to recommend the system strongly. The dangers of rain coming in, of snow and dirt obstructing the light, of too much light and heat, and of high winds or tornadoes tearing off the apparatus, have all been successfully obviated. Window space should not be lessened because of such top lighting, since windows are still necessary for ventilation. There is danger of overlooking this point, as demon-

strated by a number of "closed-air chambers" constructed as classrooms by men who considered the overhead lighting sufficient, as it may have been as lighting only, but who overlooked the needs of children for air-currents, "the breath of life," which can only be satisfied in most schools by means of windows. Even closed windows with the constant and never-failing use of central or local fans, either by the recirculation method or that of introducing constantly "fresh" air from outside, have other reasons against them than those of economy. The writer is very much in favor of wide-spread and scientific experiments with recirculation, using the same air over and over again, with only such replenishing as may come by opening doors, by leaks, and by percolation through walls, coupled with a good fan system and supplemented by an effective air-moistening and cleaning chamber. But he would not advocate erecting buildings with few side-wall windows as if this principle had been scientifically proved desirable, and its cost were inconsiderable as compared with natural ventilation at least part of the year. Both are desirable.

The saw-tooth plan of overhead lighting used by Perkins seems to be satisfactory for Eastern towns, but would prove bad in a Western cyclone or very high wind. His plan of controlling the amount of light from overhead by means of hinged metal planes hanging from the ceiling under full and easy control by the teacher seems successful. A teacher may cut off the direct rays of the sun, let in a small or large amount of light, or cut off all light when a stereopticon or other similar instrument necessitating darkness is used. This overhead system need not, of course, cover the entire ceiling. A few large windows above the pupils in the rear, right-hand corner will be sufficient. On a dark cloudy day such supplementary light is a great vision saver. And it may here be repeated that defects of vision, like cases of tuberculosis, seem to increase, according to Ayres (but not Kerr), in frequency as we go upward through the grades.

and years of school life. In the accompanying plan, the location of the skylight in each room is roughly indicated by a rectangle drawn on the floor plan. We have placed the top-lighting arrangements in a pitched roof. A flat roof is usually very bad in overheating the classrooms in hot weather. The space under the pitched roof should be kept open by ventilators in warm and hot weather.

Top lighting frees us also to some extent from the rule that usually the classroom windows at the left of the pupils, for the sake of some sunlight each day, with its cheer and disinfection, should face either east or west. This innovation thus leaves us freer to make the building front toward any point of the compass. If we wish the front where children are loaded and unloaded from transportation vehicles to be free as possible from severe winds and accumulated snow, we can have it facing the south or east. We have placed it toward the south. This has the advantage of having the heating plant on the north, and helps in forcing the air through the ducts toward the south, a well-known principle in our latitude. Orientation, usually a very important and much-neglected factor, is not so great an item with this plan of lighting. For securing cheerful rooms, and for the disinfecting influence of sunlight, it would of course be desirable to have the two long wings of classrooms extend north and south, even with overhead lighting, but this principle may now with more impunity be disregarded. We have all classrooms facing either east or west. The physics and corner elementary room, which may be used as a kindergarten, have also some south light. These rooms and others on the front may be top lighted, as may all others.

If the front of the building embraced several classrooms, and the wings extended southward to secure east and west sunlight from the side windows each day, these front classrooms would have principally north light, except for the overhead lighting. If the front were faced south these

rooms would have principally south lighting, which would make it necessary to have shades covering windows much of each day, and interfering with window ventilation. With dark-green shades the room would thus be too dark, except for the overhead lighting. Translucent tan shades should be used. Windows may be made impervious to glare by using proper glass. If the covered driveway is extended along the entire front as a portico, corridor, or porch, or if there are the driveway and right and left porches, the latter would act as an awning to the southern rays of the sun. The south is a better front than the north from the standpoint of the transportation of pupils in winter in the northern portions of our country, but not from the standpoint of direct sunlight much of the time in classrooms, to be avoided only by special devices such as a porch, awnings over windows, selected glass or glass coating, or shades covering the windows much of the time.

For the E type of building, the south exposure has a disadvantage in that it places the open end of the courts and corridors to the north. In our northern States and Canada, such a frontage would probably mean drifts of snow filling the corridors part of the year. Our plan shown here has the E form much modified by the rear corridor, which is partially closed, and would cut off drifts. If a north exposure is chosen, the skylights of the classrooms on this front may be made larger than those on the side wings. In the plan here submitted for criticism and suggestion, we have placed the front toward the north, eliminated classrooms here by putting in offices and other rooms, and have flanked much of the front with a covered driveway for the protection of pupils. The room marked post-office may be used as a classroom. The possibilities of a building in the country with overhead lighting must be given careful study, and will only be disclosed after considerable such investigation and the erection of a number of experimental buildings in different parts of the country. Some means

of collating and disseminating the results of such experience nationally should be devised by some national committee, or government bureau. To give the children in the elementary school (first six years) the advantage of east light the elementary and high-school wings should be reversed.

3. *A more educationally effective classroom* may by overhead lighting easily be provided with advantage to the entire school. The unilateral-lighting standard, seemingly so easily enforced on American city schools of recent date, and many in the country, has made as a necessary concomitant a long, narrow classroom from front to rear. Since light will not penetrate well for reading beyond twenty feet on most days of the school year, rooms have been standardized little wider than this, say twenty-two to twenty-four feet, the right-hand row of pupils sitting about three feet from the wall. In order to seat some thirty to forty-eight pupils, this room must be quite long, similar to store-rooms with narrow frontage in cities. This type of room provides about six long rows of pupils in a room about thirty-two feet in length. Such long rows of pupils are by no means as easy to teach and manage as shorter rows, with pupils nearer to the teacher and the front blackboard, on which much of the class work is written. Vision defects among as many frequently as one-fifth of the pupils complicate the difficulty. Large pupils must be placed in the rear or sides to prevent their obstructing the vision of smaller children sitting behind them. The pupils in the rear of the room are very commonly out of range of the teacher's personality, which is frequently of short range, especially among the novices employed at starvation salaries in most country and village schools. Even the voice of the average woman teacher hardly carries well this distance. The magnetism of the teacher's presence, if she has any, should reach all pupils, and pervade the entire room. No pupil should feel that he is merely sitting on the bleachers or side-lines watching the real game from afar. Thus the long room

forced upon us by the evanescent god of unilateral lighting and ventilation has many shortcomings.

Then, further, many schools have two or more groups of pupils in a room who must be taught separately. Where there are mid-year promotions, pupils of the same grade are in groups a half year apart in advancement. They can recite together in but a few subjects. Then, too, it is very common in the ordinary small school to have pupils in one room of two entirely different grades, separated by a full year of study from each other, a fifth and sixth grade, for example, and there may, in small schools, be three grades in a room, say fourth, fifth, and sixth. Four principal ways of having these different groups recite without disturbing the others in the room have been devised. The old front recitation-bench has about disappeared from graded schools. The separate recitation-room, too, is little used for elementary children to-day. The plan of having pupils who are to recite take the seats in the front half of the room, while the occupants of these seats move back, has too many disadvantages to be seriously considered, although seemingly used successfully by a few teachers in graded schools. The almost universal practice in good schools is that of having the pupils sit in right and left groups, extending to the rear of the room.

But these three long rows of pupils strung out down a long room can scarcely be called groups. They are tenuous lines, too long for an audience or reciting group on either side of the room; the two or more groups are too close together to avoid disturbing each other; and are well arranged and seated to destroy attention and interest. The room is about wide enough for one group if it is at the front of the room, as shown by those teachers who have hit on the device of having front and rear sections with a movement of all pupils between recitations. This disturbance with its carrying of books, forgetting of pencils and books, the bothering of other pupils' property in the desks, and other

features, shows the trouble teachers in many such long rooms are willing to take to get a compact reciting group near the front of the room.

The whole difficulty is easily solved by left-hand, overhead, and right-hand lighting, as above described. The limitation on the width of the room is immediately removed, and the length may be greatly shortened. Probably a complete reversal of the dimensions and the invention of the wide-short classroom is the remedy "we long have sought and mourned because we found it not." A room thirty to thirty-two feet wide, and twenty-four to twenty-eight feet from front to rear, keeping the area about 750 square feet for forty pupils, makes possible two real groups of pupils, one on the right and one on the left. With the pupils brought forward, the teacher will no longer need to "screech," one of the common diseases of schools. Her pupils will be near, even those at extremes of right and left. There is more space for large pupils in the rear; there is a much longer blackboard in front; there is a much longer space for a cloak-room in front or rear. By placing the blackboard in the rear, by the Perkins plan, the width of two doors may be added to the front blackboard. We have thought that the advantage of somewhat easier supervision of a front blackboard by the teacher might offset the loss of blackboard space. Yet the rear cloak-room, as Perkins has devised it, may be better.

The old-style long classroom, with a wardrobe of six to eight feet in width on the end, necessitates a very long school-building, depending upon the number of rooms. With a one-story building and a single row of classrooms on either of two wings, the building may become, with large numbers of pupils, interminably long, and thus almost as inconvenient as stairs and second floors and basements. The wide-short classroom abbreviates the building considerably, and thus obviates this disadvantage of extreme length. Other advantages of this new type of classroom,

yet to be constructed, will occur to all who have had considerable experience in practical education.

4. *Ventilation will be improved* and heating will be easier. The advantages of the one-story building of this character with respect to ventilation are evident. A door on either side of the classroom means cross-ventilation, at least at the front of the room where the doors are opposite. Single-sash windows above the blackboard on the right greatly increase cross-ventilation, and these can remain open much of the times when fans are not running, since there is no classroom of pupils across the hall to disturb, and the corridor roof shelters from strong winds, direct sunlight, and rain. The vents in the skylight may be opened at will to permit escape of heated air, and the plentiful windows on the left, even with a shorter room, let in plenty of air-currents when any are stirring outside. High windows on the rear may be put into such rooms as open thus to the outer air. They may or may not be used in the front corner rooms of the accompanying plan. They are not essential here and would interfere with the symmetry of the front of the building. With movable seats the elementary corner room may well have long windows on the north, and the physics room likewise. The other rooms should have full-length windows. Ventilation by fans for each room or from a central source in the heating plant behind the auditorium wing may be as efficient as in a two-story building. An air-washing room may be connected with the air-heating ("coils") room, as shown in our plan. The short classroom leaves less of each room exposed to the outer air to complicate ventilation and heating. Other ventilation advantages may yet appear. A disadvantage may lie in the difficulty of forcing air long distances horizontally from a central fan, but the south frontage facilitates this movement.

5. *The one-story plan keeps the auditorium on the ground level*, and makes unnecessary the stair-climbing which is a disadvantage from many points of view, especially from the one of public meetings.

6. *Dismissal is easier for any room or rooms* without disturbance of other classes. In a building containing both elementary and high-school pupils such mutual disturbance is easy. In the one-story consolidated building, the high school, including the seventh and eighth grades, may be in one wing (west) and the elementary school in the opposite one beyond the auditorium wing (east), and thus widely separated. Each classroom of pupils can be dismissed directly either into the corridor or to the playground. The auditorium may as suggested above have a number of exits into the courts at either side. We have located the pupils' toilets in these courts, but the assembly platform is ventilated by high windows above them. The toilets shown herewith have full partitions in each, with the doors for the sexes far apart; and elementary and high-school toilets are kept on their respective sides of the building.

7. *The cost is probably not more than for a two-story type* in spite of the increased advantages. Architect Perkins has made careful studies of comparative costs of one and two story structures, and finds the difference usually in favor of the one-story type, with equivalent facilities. The elimination of stairways, of thicker walls to support second stories, and of expensive fireproofing materials in the ceiling and roof bring down the cost. The expense of adding more rooms to the structure when necessary is very much less than in case of a two-story building, and the resulting extensions make a harmonious building instead of a disfigurement. All buildings are enormously expensive now, and this complete building would now cost upward of a hundred thousand dollars, although it may be built part by part as needed.

8. *This ease of extensions* is a point particularly in favor of the one-story school. The high-school rooms are not the same size as elementary rooms, being usually smaller. Fewer rooms at first may be needed by the high school. But either wing may be any length without injury to the

plan. The auditorium or gymnasium, with perhaps a combined lunch-room and library, may be erected after the first rooms if desired. We have unfortunately failed to indicate the swimming-pool in this plan. The lunch-room space could be used, or it could extend back of the rear cross corridor, and the other rooms could be set back to the north farther. It is not necessary or desirable to dig a basement for it.

9. *The elimination of stair-climbing* for teachers, pupils, and patrons should receive separate mention here, although mentioned above.

10. *The greater ease of management* of each classroom and of the building as a whole is obvious. Where pupils are scattered over two or three floors of a building with the toilets probably in the basement, the difficulty is great. The principal's room to the left of the entrance may be made a part of the library, since he has another room across the hall.

11. *The greater ease of using laboratories and workrooms* for both elementary and high-school pupils is in favor of the one-story type.

12. *Educationally*, the rural building should be as close to outdoor life as possible. Here, in the one-story plan, the entire school and each classroom is close to nature, and the latter is very easy of access. In a two-story building teachers very infrequently or never come down from the second or third floors to supervise and join in the play of the children. Where the playground is but a step outside, hardly any person fit to be a teacher can keep from the joyous comradeship so helpful for both young and old. All teachers should go out frequently, as much for the sake of themselves as for the children. Our building tempts them into the open.

13. *Such a school-building is easier to build* for the ordinary contractor obtainable in the country than a two or more story structure. If concrete is used, and careful plans

and perhaps moulds are furnished, the specifications should not be hard to follow. Brick also can be used. Some school boards will be tempted to build a frame structure because it is cheaper at first, but this temptation should be rigidly withheld.

14. *Protected play spaces for the little children* are provided in the courts, or patios, on either side. Playground supervision of all pupils is facilitated.

15. Other advantages of the one-story type would cover such items as freedom from danger of falling from second-story windows, ease of supervision of classrooms and auditorium by the principal, ease of getting into the machine-shop with an auto or tractor to be repaired, freedom from carrying things up and down stairs, and less danger in case of cyclones in the West.

These, then, are some of the principal advantages to be sought and gained by the one-story rural consolidated school.

IV. POSSIBLE DISADVANTAGES

Some of the disadvantages might be greater heat of classrooms in summer than for first-floor rooms of two-story buildings if a flat roof is used, which we do not advocate, somewhat greater difficulty in forcing heat and air horizontally instead of upward from a basement as in a two-story building, greater distance of travel in going about through the halls, although this is cut down by shorter classrooms and a cross corridor from wing to wing between auditorium and gymnasium, and perhaps by other means to be discovered by experience. That the advantages far outweigh the disadvantages seems to be beyond question, and we have no doubt that the one-story type will be the prevalent one for country and village schools of the future. A few further notes will conclude our examination of this type of building. More shower-baths than the three here suggested should be provided. The swimming-pool may take the place of the

machine-shop and farm-carpentry room, and these may be moved farther back. The showers could be placed at one end. The library and post-office and community exchange are in front, easy of access to the public. The teachers' rooms could be placed across the rear corridor from the pupils' toilets, thus giving more space in front. Folding gates may be used to shut off classrooms for evening and Sunday entertainments in the auditorium. The connections between elementary classrooms may be closets for the teachers. A number of improvements and refinements will be suggested, we hope, from time to time.

We may confidently expect great developments of this style of building in the next two decades. No object is better worth study, a large use of money, and careful experimentation, than to provide a rural, social, and educational centre, not only for children and youth, but of all people of a community. On such centres the future of rural life largely depends.

Wonderful is the spirit of cooperation and growth,
The consolidating of interests and the hopes of man,
Ideal is the vision of the new rural life,
But it needs must secure a structure and plan.

BIBLIOGRAPHY ON CONSOLIDATION¹

I

1. Aswell, Jas. B., State Supt. Pub. Ed., Baton Rouge, La.—“The Consolidation of School Districts, the Centralization of Rural Schools and the Transportation of Pupils at Public Expense.” Circular of information, 1906.
2. Barrett, Richard C.—“Consolidation of Schools and Transportation of Children.” Bien. Rep. Supt. Pub. Ins. of Iowa, 1901.
3. Bedichek, Una, and Baskett, Geo. F.—“The Consolidation of Rural Schools With and Without Transportation.” Bull. Univ. Texas, No. 96, 1907.
4. Biennial report, U. S. Com. of Ed., pp. 2581-4. “Transportation of Pupils to School.” 1899-1900.
5. Carrington, W. T., State Supt. Pub. Schools, Missouri—“The Rural School Problem.” Mo. School Rep., pp. 4-11, 1902.
6. “Consolidation of Schools and Transportation of Pupils.” U. S. Com. of Ed. 2:2353-2360, 1902.
7. Connor, R. D. W.—“Improvement in Rural School Houses and Grounds.” Pamphlet, Raleigh, N. C., 1900-1906.
8. Davenport, E.—“Consolidation of Country Schools.” Univ. Ill. Bull., 1904.
9. Fairchild, E. T., State Supt. of Pub. Ins., Kansas, Ed. Com. Bull. No. 1, 1908.
10. Fall, Delos, Supt. Pub. Ins., Michigan. School Rep., pp. 5-34, 1901.
11. ———“Consolidation of Schools.” Rep. Supt. of Pub. Ins., p. 9, 1902.
- 11a. Foght, H. W.—“The American Rural School.” Macmillan Co.
12. Folsom, Channing—“An Inquiry Concerning the Conveyance of Scholars in New Hampshire.” 51st N. H. School Rep., pp. 271-292, 1899-1900.
13. Fowler, Wm. K.—“The Consolidation of School Districts: the Centralization of Rural Schools.” Pub. by State of Neb. Dept. Pub. Ins., 1903.
14. Gass, Howard A.—16th Mo. Rep. of Pub. Schools, 1908-1909.

¹Prepared with help of the Library Division of the U. S. Bureau of Education.

15. Harvey, Mrs. H. Clay—"School Problems in Adair County." Bull. 1st District Normal School, Kirksville, Mo., 1908.
16. Harvey, L. D.—"Consolidation of School Districts and Transportation of Rural School Pupils at Public Expense." Michigan, Bull. No. 7, 1902.
17. Jones, Frank L.—Ind. Rep. Supt. Pub. Ins., pp. 727-782, 1902.
18. Johnson, W. H.—Annual Rep. of Jackson County Schools, Independence, Mo., 1907.
19. Jones, E. A., State Com. of Common Schools, Columbus, O.—"The Centralization of Rural Schools in Ohio." *Proceedings N. E. A.*, 1908.
20. Joyner, J. Y., Supt. Pub. Ins.—"Consolidation.—Work to Be Done and How to Do It." N. C. School Rep., 1902-3 and 1903-4.
21. ——"Consolidation of Districts." Ed. Bull. No. 1, 1902.
22. ——"Official letters, etc. "Consolidation of Districts."
23. Kelley, Patrick H., State Supt. Pub. Ins., Michigan—"Consolidation of School Districts in Michigan." Bull. No. 19, 1906.
24. Matson, Clarence H.—"Country Schools.—The New Plan." *Outlook*, p. 981, Dec., 1902.
25. McKenzie, Hector—"Concrete Examples of Consolidation of Rural Schools." N. D. Pubsh. by Dept. Pub. Ins., 1905.
26. Nelson, Frank, State Supt. Ins., Kan.—"The Consolidation of Rural Schools." Kan. School Rep., p. 38, 1901-2.
27. Olsen, J. W.—"Consolidation of Rural Schools, and Transportation of Pupils at Public Expense." Bull. No. 1 Reprint Bien. Rep. State Supt. of Pub. Ins., Minnesota, 1902.
28. Pyne, R. A., Minister of Ed. Rep. Minister of Ed., Toronto, 1910.
29. "Report of Committee of Twelve on Rural Schools." N. E. A., 1897.
30. Rep. U. S. Com. of Ed. 2:2353-2369, 1902.
31. Riggs, John F.—Bien. Rep. Supt. Pub. Ins., Iowa, 1905.
32. ——"Conditions and Needs of Iowa Rural Schools." Bull. by Supt. Pub. Ins., 1905.
33. Southall, Joseph W.—"Consolidation and Transportation." Va. School Rep., 1900-01.
34. Stone, Mason S. Cir. of Ed. Information No. 19, Dept. Ed. Vt., 1906.
35. Upham, A. A.—"Transportation of Rural School Children at Public Expense." Ed. Rev. 20:241, 1900.
36. Ustrud, H. A., Supt. Pub. Ins.—"Consolidation of Schools in South Dakota, 1908."
37. Welch, W. W., Supt. Pub. Ins., Montana. Montana School Rep., pp. 13-20, 1902.

II

Arkansas, Education Commission—"Consolidation of Rural Schools." Little Rock, Arkansas. December, 1910. 11 pp. 8°. (Its Bulletin no. 3.)

Bedichek, Una, and Baskett, G. T.—"The Consolidation of Rural Schools With and Without Transportation." 2d ed. rev. by A. C. Ellis. Austin, Texas, University of Texas [1907], 85 pp., illus., 8°. (Bulletin of the University of Texas, no. 96.) Bibliography: p. 48. A discussion of the situation in Texas and the practical experiences with consolidation in other States.

Betts, George Herbert, and Hall, Otis E.—"Consolidation and Rural School Efficiency." In their "Better Rural Schools." Indianapolis, The Bobbs-Merrill Company, 1914. Pp. 215-325.

Brogden, Lautrec C.—"Consolidation of Schools and Public Transportation of Pupils." Raleigh. Issued from office of superintendent of public instruction of North Carolina, 1911. 135 pp., illus., 8°. (Educational Bulletin XVII.)

Burnham, Ernest—"Two Types of Rural Schools, with Some Facts Showing Economic and Social Conditions." New York City, Teachers College, Columbia University, 1912. 129 pp., 8°. (Teachers College, Columbia University. Contributions to education, no. 51.)

Carney, Mabel—"Consolidated Country Schools." In her "Country Life and the Country School." Chicago, Row, Peterson & Company, 1912. Pp. 148-187.

Carrington, George D.—"Consolidation of Rural School Districts. Cost of Central High School. Free Transportation of Pupils." Auburn, Nebr., 1908. 16 pp., illus., 8°. (Nemaha County, Superintendent of Schools. Bulletin no. 3.)

"Consolidation of Schools and the Transportation of Pupils." Western Journal of Education, n. s. 8:421-501, June, 1903. Special number on this subject. Contains articles by Ellwood P. Cubberley, p. 421; Superintendent Kern, p. 437; Elmer E. Brown, p. 495; Hugh J. Baldwin, p. 496, etc.

Cubberley, Ellwood P.—"Consolidation in Central Schools." In his "Rural Life and Education." Houghton Mifflin Company, pp. 230-255.

——"Consolidation of Schools." In "A Cyclopedia of Education." Ed. by Paul Monroe, vol. II., pp. 185-189. The Macmillan Co.

[Davenport, E.]—"Consolidation of Country Schools." 2d ed. [Urbana, Ill., 1904], 56 pp., 8°. (University of Illinois bulletin, vol. II, no. 3, December 1, 1904.)

Eaton, William L.—“An Account of the Movement in Massachusetts to Close the Rural Schools, and to Transport Their Pupils, at Public Expense, to the Village Schools.” N. Sawyer & Son, printers, 1893. 8 pp., 8°. Massachusetts school exhibit, World’s Columbian Exposition.

Egglesston, J. D., and Bruère, Robert W.—“Consolidation and Transportation.” In their “The Work of the Rural School.” Harper & Brothers. Pp. 173-192.

Fairchild, E. T.—“Consolidation of Rural Schools.” *American Education*, 12:121-133, November, 1908. Reasons why they should be consolidated.

Foght, Harold W.—“Consolidation of Rural Schools.” In his “American Rural School.” Pp. 302-333. The Macmillan Co.

Fowler, William K.—“Consolidation of Rural Schools.” In National Education Association. *Journal of proceedings and addresses*, 1903. Pp. 919-929. Bibliography: pp. 924-929. Gives 29 arguments for, 12 against.

—“The Consolidation of School Districts; the Centralization of Rural Schools; and the Transportation of Pupils at Public Expense.” Lincoln, Nebr., 1903. 24 pp., 8°. (Nebraska, Department of Public Instruction, 1903.)

Graham, Albert B.—“Centralized Schools in Ohio.” Columbus, Ohio State University, 1909. 24 pp., illus., 8°. (Ohio. Agricultural College. Extension bulletin, vol. 1, no. 5, February, 1906.)

Hanifan, L. J.—“Facts and Fallacies About Consolidation of Schools in West Virginia.” Charleston, W. Va., Department of Free Schools [1914], 16 pp., illus., 8°.

Hays, Willet Martin—“Consolidated Rural Schools.” In American Association of Farmers’ Institute Workers. *Proceedings*, 1905. Washington, Government Printing Office, 1906. Pp. 53-59. Bibliography: 56-59.

Hugh, David D.—“Bulletin Concerning Rural Schools and Their Consolidation.” Greeley, State Normal School of Colorado, 1909. 38 pp., illus., 8°. (Bulletin, series IX, no. 4.) Bibliography: pp. 32-38.

Illinois, Department of Public Instruction.—“The One-room and Consolidated Country Schools of Illinois.” 4th ed., 1914. 120 pp., illus., 8°. (Circular no. 76.)

Indiana, Department of Public Instruction.—“Consolidation of Rural Schools.” In its Biennial report . . . 1911-1912. Indianapolis, W. B. Burford, contractor for state printing and binding, 1913. Pp. 105-159.

Kansas, Department of Public Instruction.—“Bulletin of Information

Regarding Consolidation of Rural Schools." Topeka, Kans., 1908. 48 pp., illus., diagr., 8°.

Kentucky, Department of Education.—"Consolidation and Transportation. . . ." Issued by Barksdale Hamlett, Superintendent of Public Instruction, Frankfort. [Louisville, Ky., The Bradley & Gilbert Co., 1913.] 93 pp., illus., 8°. (Bulletin, vol. VI, no. 3, April, 1913.)

Kern, O. J.—"Consolidation." In his "Among Country Schools." Ginn & Company [1906], pp. 240-281.

— "Consolidation of Rural Schools." *Education*, 26:14-26, September, 1905.

— "Report of a Visit to the Centralized Schools of Ohio." October, 1900. 2d ed. Rockford, Ill., 1902. 38 pp., illus., 8°.

Knorr, George W.—"Consolidated Rural Schools and Organization of a County System." Washington, Government Printing Office, 1910. 99 pp., 8°. (United States Department of Agriculture. Office of experiment stations. Bulletin 232.)

— "A Study of Fifteen Consolidated Rural Schools; Their Organization, Cost, Efficiency, and Affiliated Interests." Washington, D. C., Southern Education Board, 1911. 55 pp., illus., 8°. (Publication no. 6.)

Kunkel, O. L., and Charters, W. W.—"Rural School Consolidation in Missouri." Columbia, Mo., University of Missouri, 1911. 36 pp., illus., 8°. (University of Missouri bulletin. Education series, vol. I, no. 2.) Bibliography: pp. 35-36.

Lake County, Ind.—"Consolidation of Schools." In its educational report, 1913. Pp. 68-81.

Longsdorf, H. H.—"The Consolidation of Country Schools, and the Transportation of the Scholars by use of Vans." Harrisburg, Pa., Wm. Stanley Ray, State printer, 1901. 89 pp., 8°. (Pennsylvania, Department of Agriculture. Bulletin no. 71.)

Louisiana, Department of Education.—"The Consolidation of School Districts and Centralization of Rural Schools and the Transportation of Pupils at Public Expense." [Baton Rouge, 1906.] 71 pp., illus., 8°. "References for Information": pp. 64-71.

Manitoba, Department of Education.—"Consolidation of Rural Schools in Manitoba." Special report. . . . 1913. 43 pp., 8°.

Michigan, Department of Public Instruction.—"Consolidation of School Districts in Michigan." [Lansing, 1906.] 23 pp., illus., 8°. (Bulletin no. 19, 1906.)

Mississippi, Department of Education. Part I.—"Consolidation of Schools and Transportation of Pupils." Part II.—"County Agricultural High Schools, with Course of Study." Prepared and

issued by J. N. Powers, State Superintendent of Public Education, May, 1913. Jackson, Miss., Jones Ptg. Co. [1913]. 68 pp., illus., 8°. (Its Bulletin no. 8, 1913.)

Monahan, A. C.—“Consolidation of Rural Schools.” *Atlantic Educational Journal*, 9:169-172, 215-217, 247-249, 293-294, January to April, 1914. Contents: I. History and Extent of the Movement.—II. Advantages of Consolidation.—III. Transportation at Public Expense.—IV. How Consolidation Is Effected.

Nebraska, Department of Public Instruction.—“The Consolidation of Rural Schools.” E. C. Bishop, State Superintendent. Lincoln, 1910. 39 pp., illus., 8°.

—“Consolidation of Schools.” In its “School Buildings and Grounds in Nebraska.” Lincoln, 1902. Pp. 228-265.

North Dakota, State Board of Education.—“The Consolidation of Rural Schools in North Dakota.” Prepared by N. C. Macdonald. Devils Lake, N. D., Journal Publishing Co., State Printers, 1913. 33 pp., illus., 8°.

Nova Scotia, Superintendent of Education of the Public Schools.—“The Macdonald Consolidated School.” In his Annual Report, 1903. Halifax, N. S., King’s Printer, 1904. Pp. xxv-xxxiii, illus., plans, tables.

Oklahoma, State Board of Education.—“Rural School Consolidation.” A bulletin of information issued by the Oklahoma State Board of Education, 1911 [n. p. 1911]. 29 pp., illus., 8°.

Phillips, Eugene M.—“Consolidation of Rural Schools in Minnesota.” Issued by the Department of Public Instruction, C. G. Schulz, Superintendent. [St. Paul? 1913.] 50 pp., illus., 8°. (Bulletin no. 41.)

Prince, John T.—“Consolidation of Rural Schools.” In National Education Association. Journal of proceedings and addresses, 1903. Pp. 929-935.

Probst, Albert Frederick.—“Consolidation and Transportation.” *Elementary School Teacher*, 9:1-16, September, 1908. Illus.

Schmidt, C. C.—“The Consolidation of Rural Schools in North Dakota.” Grand Forks, N. D., University of North Dakota, 1912. 85 pp., illus., 12°. (University of North Dakota. Departmental bulletins. Education, no. 3, October, 1912.) “References”: pp. 84-85.

Sharpe, William F.—“The Housing of Consolidated Schools in Rural Communities.” *Educator-journal*, 12:3-17, September, 1911, illus., plans.

Stone, Mason S.—“Centralization of Schools.” Act of 1906. State

of Vermont. 6 pp., 8°. (Vermont Department of Public Instruction. Circular of information no. 43.)

Tennessee, Department of Public Instruction.—Bulletin of information regarding consolidation of schools and transportation of pupils. Nashville, Tenn., McQuiddy Printing Co., 1912. 103 pp., 8°.

Texas, Department of Education.—“Consolidation of Rural Schools.” Austin, Texas, Austin Printing Company, 1912. 67 pp., illus., 8°. (Its Bulletin no. 15.)

True, A. C.—“Some Problems of the Common Rural School.” In United States Department of Agriculture Yearbook, 1901. Pp. 133-154.

United States Bureau of Education.—“Consolidation of Schools and Transportation of Pupils.” In its Report of the Commissioner, 1900-1901. Washington, Government Printing Office, 1902. Pp. 161-213.

Upham, A. A.—“Transportation of Rural School Pupils at Public Expense.” *Educational Review*, 20:241-251, October, 1900.

Vermont, Department of Education—1. “Closure of Small Schools.” 2. “Consolidation of Schools.” April 1, 1906. St. Albans, Vt., Messenger Company Print, 1906. 20 pp., 12°. (Circular of educational information, no. XIX.)

Washington, Department of Education.—“Consolidation of Rural Schools and Transportation of Pupils.” Olympia, Wash., E. L. Boardman, Public Printer, 1911. 120 pp., illus., 8°. (Bulletin no. 7, August 1, 1911.) Prepared by J. M. Layhue.

Winnebago County, Ill., Superintendent of Schools.—“Consolidation of Schools in Country Life Education.” In his Report, 1912. Pp. 47-66. See also earlier reports.

Wisconsin, Department of Education.—“Consolidation of School Districts and Transportation of Rural School Pupils at Public Expense.” Madison, Democrat Printing Company, State Printer, 1902. 20 pp., illus., diagrs., 8°. (Its Bulletin of information, no. 7.)

III

A. CONSOLIDATION OF SCHOOLS

Alderman, S. S.—“Consolidation and Transportation in North Carolina.” *North Carolina Education*, 8:3-4, March, 1914.

Arp, J. B.—“Rural Education and the Consolidated School.” World Book Co.

Bailey, Liberty Hyde.—“Danger in Rural School Consolidation.” *School and Society*, 1:315-316, February 27, 1915.

Brogden, L. C.—“Consolidation—An Effective Means for Making Rural

Schools Grow." In "Conference for Education in the South. Proceedings, 1913," pp. 200-206.

Buroker, A. B.—"Centralization of Rural Schools." *Journal of Education*, 81:237, 240, 242-243, March 4, 1915.

Button, H. O.—"Is Consolidation of Rural Schools Advisable?" In Washington Educational Association. Proceedings, 1912, pp. 154-160.

"Consolidation of Rural Schools in North Dakota." *School and Society*, 3:273, February 19, 1916.

"Consolidation of Schools in Utah." *Utah Educational Review*, vol. 8, nos. 9-10, May-June, 1915.

Cubberley, Ellwood P.—"Consolidation from the Standpoint of Administration and Supervision." In Utah Educational Association. Proceedings, 1915. Pp. 28-31.

— "Consolidation in Central Schools." In his "Rural Life and Education." Boston, New York, Houghton Mifflin Company, 1914. Pp. 230-255.

Eggleston, J. D., and Bruère, Robert W.—"Consolidation and Transportation." In their "The Work of the Rural School." New York and London, Harper & Brothers, 1913. Pp. 173-192.

Finegan, Thomas E.—"The Township System and the Consolidation of Rural Schools." In New York State Agricultural Society. Proceedings of the 75th annual meeting, 1915. Albany, N. Y., Department of Agriculture of the State of New York, 1915. Pp. 1651-1679.

Foght.—"The Rural Teacher and His Work." Macmillan.

— "A Survey of Consolidation." (Bulletin of the U. S. Bureau of Education.)

Grupe, M. A.—"How the Problems of the Rural Schools Are Being Met." *Popular Science Monthly*, 83:484-490, November, 1913.

Hall, Q. E.—"Consolidation of Districts." In New York (State) University. Proceedings of the fiftieth convocation, Albany, 1914. Albany, The University of the State of New York, 1915. Pp. 100-116.

Holst, J. H.—"Victor Consolidated Schools." *Intermountain Educator*, 8:5-7, January, 1913.

Describes the Victor consolidated district no. 7 of Victor, Montana.

Kentucky, Department of Education.—"Consolidation and Transportation." Issued by Barksdale Hamlett, Superintendent of Public Instruction, Frankfort. [Louisville, Ky., The Bradley & Gilbert Co., 1913.] 93 pp., illus. (incl. ports.), 8°. ([Bulletin] vol. 6, no. 3, April, 1913.)

Lake County, Indiana.—"Consolidation of Schools." In its *Educational Report*, 1913. Pp. 68-81.

Massachusetts, Board of Education.—Report of the Board of Education in Accordance with the Provisions of Chapter 70, Resolves of 1911, in the Matter of the Support of Public Education; Including also Report Required Under Chapter 39, Resolves of 1912, Relating to the Payment of Transportation Expenses of Pupils Residing in Towns Not Maintaining High Schools and Attending High Schools in Other Towns

or Cities. Boston, Wright & Potter Printing Company, State Printers, 1912. 74 pp., 8°.

At head of title: The Commonwealth of Massachusetts. Mississippi, Department of Education.—Part I. "Consolidation of Schools and Transportation of Pupils." Part II. "County Agricultural High Schools, with Course of Study." Prepared and issued by J. N. Powers, State Superintendent of Public Education, May, 1913. Jackson, Miss., Jones Printing Company [1913], 68 pp., illus., 8°. (Its Bulletin no. 8, 1913.)

At head of title: State Department of Public Education, Jackson, Mississippi.

Monahan, A. C.—"Consolidation of Rural Schools. History and Extent of the Movement." *Atlantic Educational Journal*, 9:169-172, 215-217, 247-249, January to March, 1914.

Moore, W. Clement.—"The Consolidation of Rural Schools." *American School Board Journal*, 46:8, March, 1913.

New Jersey, Department of Public Instruction.—"Improvement of Rural Schools by Means of Consolidation." Trenton, 1916. 41 pp., plates, 8°.

Rapeer, L. W.—"The Consolidated Rural School Building." *American School Board Journal*, Milwaukee.

— "The One-Story Rural Consolidated School Building." *Ibid.*, September, 1919.

— "The Consolidated School Plant." *School and Society*, February 13, 1915.

— "Rural School Consolidation and National Consolidation." *Journal of Educational Administration and Supervision*, June, 1918.

"School Consolidation in Tennessee." *School and Society*, 1:923-924, June 26, 1915.

Schwering, Benjamin.—"Consolidation of Country Schools." *Progressive Teacher*, 19:33-35, April, 1913. Gives the advantages of the consolidated school, taking as examples the John Swaney School of Putnam County, Illinois, and the Lee's Creek School of Lee's Creek, Ohio.

Smith, Melvin C.—"Advantages of Consolidation." *School News and Practical Educator*, 29:239-240, January, 1916.

Tennessee, Department of Public Instruction.—"Rural School Situation in Tennessee; Bulletin of Information Regarding Consolidation of Schools and Transportation of Pupils." Issued by the Department of Public Instruction. Nashville, Tenn., McQuiddy Printing Company, 1911. 103 pp., illus., 8°.

Texas, Department of Education.—"Consolidation of Rural Schools." Austin, Texas, Austin Printing Company, 1912. 67 pp., illus., 8°. (Its Bulletin no. 15.)

Warner, E. F.—"The Centralization of Rural Schools." *Ohio Teacher*, 33: 316-319, February, 1913.

Webb, J. C.—"Early Consolidation in Indiana." *Journal of Education*, 83:318, March 23, 1916.

Williams, S. H.—“Errol Consolidated Rural School.” *Elementary School Journal*, 16:358-368, March, 1916.

Winnebago County, Ill., Superintendent of Schools.—“Consolidation of Schools in Country Life Education.” In its Report, 1912. Pp. 47-66.

Winship, A. E.—“Consolidation and Transportation.” *Journal of Education*, 77:257-258, March 6, 1913.

Describes the ideal system of transportation as used in Burley, Idaho. Wisconsin. Committee of Fifteen.—“Consolidation of School Districts. Report of a Sub-Committee of Fifteen Appointed by the State Superintendent of Schools to Investigate Conditions in the Rural Schools of Wisconsin.” Prepared by Pres. F. A. Cotton, Prof. M. V. O’Shea, Inspector W. E. Larson. Issued by C. P. Cary, State Superintendent. Madison, Democrat Printing Company, State Printer, 1912. 93 pp., illus., fold pl., 8°. ([Wisconsin, Department of Education] Bulletin no. 17.)

“A reference list of books, pamphlets, and bulletins, dealing with the subject of consolidation”: pp. 89-90.

B. RURAL SURVEYS

Bailey, Liberty Hyde.—“The Survey-Idea in Country Life Work.” 19 pp. Address at Cornell University, Ithaca, N. Y.

Bureau of Municipal Research, New York.—“Training School for Public Service. Preliminary Report on Conditions and Needs of Rural Schools in Wisconsin. Results of Field Study Reported to the Wisconsin State Board of Public Affairs by the Training School for Public Service.” August, 1912 (New York City, 1912), 92 pp., 8°. (Efficient Citizenship Bulletin, no. 587.)

Colorado State College of Agriculture and the Mechanic Arts, Fort Collins. Department of Rural and Industrial Education.—“The Rural and Village Schools of Colorado; an Eight-Year Survey of Each School District, 1906-1913, Inclusive,” by C. G. Sargent, Colorado Agricultural College, 1914. 106 pp., illus., diagrs., maps., 8°. ([Bulletin] ser. xiv, no. 5.)

Elliff, Joseph Dolliver, and Jones, Abner.—“A Study of the Rural Schools of Saline County, Missouri.” Columbia, Mo., University of Missouri, 1915. 32 pp., map., 8°. (The University of Missouri Bulletin, vol. 16, no. 22. Education ser. 11.)

Bibliography of school surveys: pp. 29-32.

Felton, Ralph A.—“A Rural Survey of _____ Community, Prepared in Outline.” New York, Country Church Work, Board of Home Missions of the Presbyterian Church in the U. S. A. [1915], 38 pp., 97 forms, 8°. Contains bibliographies.

Galpin, C. J.—“A Method of Making a Social Survey of a Rural Community.” 11 pp. (University of Wisconsin. Agricultural experiment station. Circular of information no. 29, January, 1912.)

Georgia, Department of Education.—“Educational Survey of Bulloch

County, Georgia." By M. L. Duggan, Rural School Agent. [Atlanta?], 1915, 72 pp., illus., 8°.

— "Educational Survey of Clayton and Taliaferro Counties, Georgia." By M. L. Duggan, Rural School Agent . . . under the direction of the Department of Education. M. L. Brittain, State Superintendent of Schools. [Atlanta?], 1915, 23 pp., illus. (incl. ports., plans), 8°. Numbers 2 and 3 in a series of educational surveys of the counties of Georgia.

— "Educational Survey of Morgan County, Georgia." By M. L. Duggan, Rural School Agent. [Atlanta?], 1915, 77 pp., illus., 8°.

— "Educational Survey of Rabun County, Georgia." By M. L. Duggan, Rural School Agent . . . under the direction of the Department of Education. M. L. Brittain, State Superintendent of Schools. [Atlanta], 1914, 48 pp., illus., map, 8°. No. 1 in a series of educational surveys of the counties of Georgia.

[Hill, Walter B.]—"Rural Survey of Clarke County, Georgia, with Special Reference to the Negroes." [Athens, Ga., 1915], 63 pp., illus., maps, diagrs., 8°. (Bulletin of the University of Georgia, vol. xv, no. 3.)

Phelps-Stokes fellowship studies, no. 2.

Morse, H. N., Eastman, E. Fred, and Monahan, A. C.—"An Educational Survey of a Suburban and Rural County." Washington, Government Printing Office, 1913. 68 pp., 8°. (U. S. Bureau of Education. Bulletin, 1913, no. 32.)

Survey of Montgomery County, Md.

Odell, Frank G., and Delzell, James E.—"Suggested Outline for a Rural School Survey." *Nebraska Teacher*, 14:521, May, 1912.

Outline is divided into four sections, as follows: Physical Survey, Social Survey, Educational Survey, and Economic Survey.

"Ohio Rural Life Survey."—*Ohio Teacher*, 33:49-50, September, 1912.

Ohio, State School Survey Commission.—"Report to the Governor of Ohio by the Ohio State School Survey Commission. A Co-operative Field Study of 659 Rural Village Schools in 88 Counties, and an Extensive Study of 9,000 Schoolrooms and of 395 School Systems, January, 1914." Columbus, Ohio, The F. J. Heer Printing Company, 1914. xxviii, 352 pp., front., illus., plates, diagrs., 8°.

Oliver J. Thatcher, chairman.

Presbyterian Church in the U. S. A.—"Board of Home Missions. Department of Church and Country Life. Ohio Rural Life Survey."

"Church Growth and Decline in Ohio." [New York, 1914?], 32 pp., 8°.

— "Country Churches of Distinction." [New York, 1914?], 48 pp., illus., 8°.

— "Northwestern Ohio." [New York, 1914?], 70 pp., illus., 8°.

— "Southeastern Ohio." [New York, 1914], 64 pp., 8°.

— "Southwestern Ohio." [New York, 1914?], 93 pp., 8°.

— "A Survey in Arkansas, Illinois, Indiana, Kentucky, Maryland, Missouri, Pennsylvania, and Tennessee." [New York, Redfield Brothers, Inc., 1911-1913], 8v., illus., 8°.

Rev. Warren H. Wilson, 156 Fifth Avenue, New York City, is superintendent of this department of Presbyterian mission work.

"Rural School Survey in Nebraska." *Middle West School Review*, 8:32, December, 1915.

St. John, G. B.—"The Sag Harbor Survey." Report of the Presbyterian Church Home Missions, 156 Fifth Avenue, New York, 1911.

— "The Survey of Huntingdon Presbytery." Presbyterian Church, Board of Home Missions, Department of Immigration, 1910. 50 pp.

Thomson, Edward H.—"A Farm-Management Survey of Three Representative Areas in Indiana, Illinois, and Iowa." [Washington, Government Printing Office], 1914, 42 pp., incl. illus., map, tables, diagrs., 8°. (U. S. Dept. of Agriculture. Bulletin no. 41.)

Contribution from the Bureau of Plant Industry.

Wells, Rev. George Frederick.—"Bibliography on the Rural Social Survey." In Pennsylvania Rural Progress Association. Proceedings, 1912. Pp. 168-171.

— "A Social Survey for Rural Communities." 1911. 24 pp. Address the author, 215 Fourth Avenue, New York, N. Y.

Wilson, W. H.—"The Rural Life Survey for Church and School." In Conference for Education in the South. Proceedings, 1912. Pp. 87-97.

— "Social and Educational Survey in the Country." In Southern Educational Association. Proceedings, 1912. Pp. 115-121.

C. RURAL LIFE

Anderson, W. L.—"The Country Town." Garden City, N. Y.: Doubleday, Page Co., 1914.

Bailey, L. H.—"The Country Life Movement." New York: Macmillan Co., 1911.

— "The Outlook to Nature." New York: Macmillan Co., 1911.

— "The State and the Farmer." New York: Macmillan Co., 1908.

— "The Training of Farmers." New York: The Century Co., 1909.

— "York State Rural Problems, I." Albany, N. Y.: J. B. Lyon Co., 1913.

— "York State Rural Problems, II." Albany, N. Y.: J. B. Lyon Co., 1915.

Butterfield, K. L.—"Chapters in Rural Progress." Chicago: University Press, 1908.

Cabot—"What Men Live By." New York: Houghton Mifflin Co., 1916.

Crow, Martha F.—"The American Country Girl." New York: F. A. Stokes Co., 1915.

Curtis, H. S.—"Play and Recreation in the Open Country." Boston: Ginn & Co., 1914.

Field, Jessie—"The Corn Lady." Chicago: A. Flanagan & Co., 1915.

Fiske, G. W.—"The Challenge of the Country." New York: The Association Press Co., 1912.

Holeman, C. W., and Murphy, C. D.—"Social Centers in the Southwest." Dallas, Texas: Texas Farm and Ranch Pub. Co., 1912.

Hutchinson, F. K.—"Our Country Life." Chicago: A. C. McClurg Co., 1912.

Israel, H. (Editor)—“Unifying Rural Community Interests.” New York: Association Press, 1914.

McCormick, W.—“The Boy and His Clubs.” Chicago: F. H. Revel Co., 1912.

Mason, W. P.—“Water Supply.” New York: John Wiley & Sons, 1916, 4 ed. rev.

Needham, Mary M.—“Folk Festivals.” New York: B. W. Nuebsch, 1912.

Page, L. W.—“Roads, Paths and Bridges.” New York: Sturgis and Walton Co., 1912.

Plunkett, H. C.—“The Rural Life Problems of the United States.” New York: The Macmillan Co., 1910.

Powell, E. P.—“How to Live in the Country.” St. Paul, Minn.: Webb Pub. Co.

Robertson, J. W.—“Conservation of Life in Rural Districts.” New York: Association Press, 1911.

Sims, N. L.—“A Hoosier Village.” Longmans, Green Co., 1912.

Stern, R. B.—“Neighborhood Entertainments.” New York: Sturgis and Walton Co., 1911.

Waugh, F. A.—“Rural Improvement.” New York: Orange Judd Co., 1914.

____—“Report of the Commission on Country Life.” New York: Sturgis and Walton Co., 1912.

____—“Balancing Country Life.” New York: Association Press, 1917.

____—“Digest of the Federal Farm Loan Act.” U. S. Treas. Dept., Federal Farm Loan Board Circ., vol. 4, 1916.

Wilson, W. H.—“The Evolution of a Country Community.” Boston: Pilgrim Press, 1912.

THE RURAL CHURCH

Ashenhurst, J. O.—“The Day of the Country Church.” New York: Funk & Wagnalls Co., 1910.

Bemies, C. O.—“The Church in the Country Town.” Chicago: American Baptist Publishing Society, 1912.

Bricker, G. A., et al.—“Solving the Country Church Problem.” Cincinnati: Jennings & Graham, 1913.

Butterfield, K. L.—“The Country Church and the Rural Problem.” Chicago: University Press, 1911.

Earp, E. L.—“The Rural Church Movement.” New York: Methodist Book Concern, 1914.

Felton, R. A.—“Study of a Rural Parish: A Method of Survey.” New York: Board of Home Missions of Presbyterian Church, 1915.

Gill, O. C., and Pinchot, G.—“The Country Church.” New York: The Macmillan Co., 1913.

Mills, H. S.—“The Making of a Country Parish.” New York: Missionary Education Movement, 1914.

Tipple, E. S.—“Some Famous Country Parishes.” New York: Eaton & Mains, 1911.

Vogt, P. L.—“The Church and Country Life.” New York: Missionary Education Movement, U. S. and Canada, 1916.

Wilson, W. H.—“The Church of the Open Country.” New York: Missionary Education Movement of the U. S., 1911.

—“Rural Church and Community Betterment: The Country Church and Rural Welfare.” New York: International Committee, Y. M. C. A. Press, 1912.

Publications of the Association Press: “Unifying the Rural Community,” “The Country Church and Community Co-operation,” “The Rural Church,” “The Home of the Countryside,” “The Rural Church Message.”

RURAL SOCIOLOGY AND ECONOMICS

Adams, E. F.—“The Modern Farmer and His Business Relations.” San Francisco: N. J. Stone Co.

Anderson, F. J.—“The Farmer of To-Morrow.” New York: The Macmillan Co., 1914.

Bailey, L. H.—“The State and the Farmer.” New York: The Macmillan Co., 1917.

Benson, O. H., and Betts, G. H.—“Agriculture and the Farming Business.” Indianapolis: The Bobbs-Merrill Co., 1917.

Bookwalter, J. W.—“Rural Versus Urban: Their Conflict and Its Causes.” New York: By the Author, 1911.

Brooks, T. J.—“Markets and Rural Economics.” St. Paul, Minn.: Webb Pub. Co.

Carver, T. N.—“Principles of Rural Economics.” St. Paul, Minn.: Webb Pub. Co.

Carver, T. N. (Compiler)—“Selected Readings in Rural Economics.” Boston: Ginn & Co., 1916.

Coulter, J. L.—“Co-operation Among Farmers.” St. Paul, Minn.: Webb Pub. Co.

Fairchild, G. T.—“Rural Wealth and Welfare.” New York: Macmillan Co., 1909. 2d ed.

Gillette, J. M.—“Constructive Rural Sociology.” St. Paul, Minn.: Webb Pub. Co., 1912.

Green, J. B.—“Law for the American Farmers.” New York: The Macmillan Co., 1911.

Herrick, M. T., and Ingalls—“Rural Credits.” New York: D. Appleton & Co., 1914.

Hunt, T. F.—“How to Choose a Farm.” New York: The Macmillan Co., 1906.

Morman, J. B.—“The Principles of Rural Credits: As Applied in Europe and as Suggested for America.” New York: The Macmillan Co., 1915.

Myrick, H.—“Agriculture and Preparedness.” New York: Orange Judd Co., 1917.

—“Co-operative Finance.” New York: Orange Judd Co.

—“How to Co-operate.” New York: Orange Judd Co.

Myrick, H.—“The Federal Farm Loan System.” New York: Orange Judd Co., 1917.

Nourse, E. G.—“Agricultural Economics.” Chicago: University Press, 1916.

Phelan, J.—“Rural Economics and Rural Sociology.” Eau Claire, Wis.: Eau Claire Book Co., 1913.

Poe, C.—“How Farmers Co-operate and Double Profits.” New York: Orange Judd Co., 1915.

Powell, G. H.—“Co-operation in Agriculture.” New York: The Macmillan Co., 1914.

Taylor, H. C.—“An Introduction to the Study of Agricultural Economics.” New York: The Macmillan Co., 1915.

Vogt, P. L.—“Introduction to Rural Sociology.” New York: D. Appleton & Co., 1917.

Weld, L. D. H.—“The Marketing of Farm Products.” New York: The Macmillan Co., 1917.

Wiley, H. W.—“The Lure of the Land—Farming After Fifty.” New York: The Century Co., 1915.

SANITATION AND HYGIENE

Brewer, I. J.—“Rural Hygiene.” St. Paul, Minn.: Webb Pub. Co., 1913.

Bushore, H. B.—“Sanitation of the Country House.” St. Paul, Minn.: Webb Pub. Co., 1905.

Dodd, Mrs. Helen—“The Healthful Farm House.” Boston: Whitcomb & Barrows, 1906.

Harris, H. F.—“Health on the Farm.” New York: Sturgis & Walton Co., 1911.

Hutchinson, Woods—“Exercise and Health.” St. Paul, Minn.: Webb Pub. Co., 1915.

Lipman, J. G.—“Bacteria in Relation to Country Life.” Chicago: *Breeder's Gazette*, 1908.

Ogden, H. N.—“Rural Hygiene.” Chicago: *Breeder's Gazette*, 1911.

Santee, Dr.—“Farm Sewage.” St. Paul, Minn.: Webb Pub. Co., 1915.

—“The American Red Cross.” Rural Nursing Service, Washington, D. C.

D. AGRICULTURAL EDUCATION

Bricker, G. A.—“Agricultural Education for Teachers.” New York: American Book Co., 1914.

—“The Teaching of Agriculture in the High School.” New York: The Macmillan Co., 1911.

Cromwell, A. D.—“Agriculture and Life.” Philadelphia: J. B. Lippincott Co., 1915.

Davenport, E.—“Education for Efficiency.” New York: D. C. Heath & Co., 1914.

Davis, B. M.—“Agricultural Education in the Public Schools.” Chicago: University of Chicago Press, 1912.

Eaton, T. H.—“Organization and Methods in Agriculture in Secondary Schools.” New York: Teachers College, Columbia University, 1917.

Hart, J. K.—“Educational Resources of Village and Rural Communities.” New York: The Macmillan Co., 1914.

Hummel, W. B. and B. R.—“Materials and Methods in High School Agriculture.” New York: The Macmillan Co., 1913.

Leake, A. H.—“Means and Methods of Agricultural Education.” Boston: Houghton Mifflin Co., 1915.

Nolan, A. W.—“The Teaching of Agriculture.” Boston: Houghton Mifflin Co., 1918.

Thompson, F. E., et al.—“Teachers’ Manual of Educational Agriculture.” Boston: Ginn & Co., 1908.

Waugh, F. A.—“The Agricultural College.” New York: Orange Judd Co., 1916.

RURAL SCHOOLS

Alderman, L. R.—“School Credit for Home Work.” Boston: Houghton Mifflin Co., 1915.

Arp, J. B.—“Rural Education and the Consolidated School.” Yonkers-on-the-Hudson: World Book Co., 1918.

Barry—“The Hygiene of the Schoolroom.” New York: Silver, Burdett Co.

Betts, G. H., and Hall, O. E.—“Better Rural Schools.” Indianapolis, Ind.: Bobbs-Merrill Co., 1914.

Betts, G. H.—“New Ideas in Rural Schools.” Houghton Mifflin Co., 1913.

Burk, F. W.—“Health and the School.” St. Paul, Minn.: Webb Pub. Co.

Burnham, E.—“Two Types of Rural Schools.” New York: Teachers College, Columbia University, 1912.

Carney, Mabel—“Country Life and the Country School.” Chicago: Row, Peterson & Co., 1912.

Challman, S. A.—“The Rural School Plant.” Milwaukee: Bruce Pub. Co., 1918.

Cubberley, E. P.—“Rural Life and Education.” Boston: Houghton Mifflin Co., 1914.

—“The Improvement of Rural Schools.” Boston: Houghton Mifflin Co., 1912.

Culter, H. M., and Stone, Julia M.—“The Rural School: Its Methods and Management.” New York: Silver, Burdett Co., 1913.

Curtis, H. S.—“Education Through Play.” New York: Macmillan Co., 1915.

—“Play and Recreation for the Open Country.” Boston: Ginn & Co., 1914.

Dinsmore, J. W.—“Teaching a District School.” Cincinnati: American Book Co., 1913.

Dressler, F. B.—“School Hygiene.” St. Paul, Minn.: Webb Pub. Co.

Eggleston, J. D., and Bruère, R. W.—“The Work of the Rural School,” New York: Harper & Bros., 1913.

Foght, H. W.—“The American Rural School.” New York: Macmillan Co., 1910.

____—“The Rural Teacher and His Work.” New York: The Macmillan Co., 1918.

Hart, J. K.—“Educational Resources of Village and Rural Communities.” New York: The Macmillan Co., 1916.

Kennedy, Jos.—“Rural Life and the Rural School.” Cincinnati: American Book Co., 1915.

Kern, O. J.—“Among Country Schools.” Boston: Ginn & Co., 1916.

McKeever, W. A.—“Farm Boys and Girls.” New York: The Macmillan Co., 1912.

Pickford, A. F.—“Rural Education.” St. Paul, Minn.: Webb Pub. Co., 1915.

Quick, Herbert—“The Brown Mouse.” Indianapolis: Bobbs-Merrill Co., 1916.

Robbins, C. L.—“The School as a Social Institution: An Introduction to the Study of Social Education.” Boston: Allyn & Bacon, 1918.

Seeley, H. H.—“The Country School.” New York: Charles Scribner's Sons, 1913.

Wilkinson—“Rural School Management.” New York: Silver, Burdett Co., 1916.

IV

WHERE YOUR COMMUNITY CAN GET HELP

The communities in your state have a number of agencies which they may call upon for advice. Some of these are state-aided organizations, boards, and institutions which send their representatives upon request and entirely without charge. It is their purpose to serve the entire state. They should be consulted freely. Assistance should also be sought from publications of various sorts, many of which may be had on request.

Before advice is sought from state and county agencies there should be a definite local group which will give responsibility to the request and a reasonable probability that the advice will be acted upon. Some of the agencies and publications are as follows:

A. COMMUNITY ORGANIZATION

Agencies

The Farm Bureau of your county.
The State Agricultural College, Extension Service.
The United States Department of Agriculture, Washington.
The Federal Board for Vocational Education.

Books

“Chapters in Rural Progress”—K. L. Butterfield—University of Chicago Press, Chicago.

“The Country Town”—W. L. Anderson—Baker & Taylor Co., New York.
 “The Social Center”—E. J. Ward—Appleton & Co., New York.
 “Community Rebuilding, How Can It Be Done”—E. L. Morgan—Encyclopedia Our Wonder World, Volume 10—Geo. L. Sherman & Co., Boston.
 “The Evolution of the Country Community”—Warren H. Wilson—Pilgrim Press, Boston.
 “Constructive Rural Sociology”—John M. Gillette—Sturgis & Walton, New York.
 “Introduction to Rural Sociology”—Paul L. Vogt—Appleton & Co., New York.

B. FARM PRODUCTION

Agencies

The Farm Bureau or Farm Agent of your county.
 The State Agricultural College, Extension Service.
 The State Board of Agriculture, State House, Boston.
 The United States Department of Agriculture, Washington.

Books

“Fertilizers and Crops”—L. L. Van Slyke—Orange Judd Co., New York.
 “Productive Farm Crops”—E. G. Montgomery—J. B. Lippincott, Philadelphia.
 “Principles of Fruit Growing”—L. H. Bailey—Macmillan Company, New York.
 “Dairy Farming”—C. H. Eckles—Macmillan Company, New York.
 “Feeds and Feeding”—Henry and Morrison—Madison, Wisconsin.
 “Farm Management”—G. F. Warren—Macmillan Company, New York.
 “Equipment for the Farm and Farmstead”—H. C. Ramsower—Ginn & Company, New York.
 “Productive Poultry Husbandry”—H. R. Lewis—J. B. Lippincott, Philadelphia.

C. FARM BUSINESS

Agencies

The Farm Bureau of your county.
 The marketing agent of your district.
 The State Agricultural College, Extension Service.
 The State Board of Agriculture.
 The Chamber of Commerce of leading cities.
 The United States Department of Agriculture, Bureau of Markets, 148 State Street, Boston.

Books

“Marketing Farm Products”—L. D. Weld—Macmillan Company, New York.
 “Principles of Rural Economics”—T. N. Carver—Ginn & Co., New York.

"An Introduction to the Study of Agricultural Economics"—H. C. Taylor—Macmillan Company, New York.

"Co-operation in Agriculture"—G. Harold Powell—Macmillan Co., New York.

"Co-operative Marketing"—W. W. Cumberland—Princeton University Press.

"Rural Credits"—J. B. Norman—Macmillan Company, New York.

D. CONSERVATION

Agencies

The Farm Bureau of your county.

The State Agricultural College, Extension Service.

The Local or National Board of Food Administration.

The National Civic Federation, New England Section, 20 Ashburton Place, Boston.

The Special Aid Society for American Preparedness, 142 Berkley Street, Boston.

The Federation of Women's Clubs.

The State Forestry Association.

Books

"The Conservation of Natural Resources in the United States"—Charles R. Van Hise—Macmillan Company, New York.

"Everyday Food in War Time"—Mary S. Rose—Macmillan Company, New York.

"Nature and Man in America"—N. S. Shaler—C. Scribner's, New York.

"The Landscape Beautiful"—F. A. Waugh—Orange Judd Company, New York.

E. BOYS' AND GIRLS' ACTIVITIES

Agencies

The Farm Bureau of your county.

The State Agricultural College, Extension Service.

The State Board of Education, State Capital.

The State Y. M. C. A., Rural Work Department.

The State Society for the Prevention of Cruelty to Children.

The Boy Scouts of America, 200 Fifth Avenue, New York.

The Camp Fire Girls, 118 East 28th Street, New York.

The Girl Scouts, 1 Madison Avenue, New York.

Books

"Elementary Agriculture"—James S. Grimm—Allyn & Bacon, 172 Tremont Street, Boston.

"Handicaps of Childhood"—Haddington Bruce—Dodd Mead & Co., New York.

"Reaching the Boys of an Entire Community"—Y. M. C. A. Press, New York.
 "Farm Boys and Girls"—Wm. A. McKeever—Macmillan Company, New York.
 "The Boy Scouts of America" (manual)—200 Fifth Avenue, New York.
 "The Camp Fire Girls" (manual)—118 East 28th Street, New York.
 "The Girl Scouts of America" (manual)—1 Madison Avenue, New York.

F. COMMUNITY LIFE

I. HOME AFFAIRS

Agencies

The Farm Bureau Home Demonstration Agent of your county.
 The State Agricultural College, Extension Service.
 State Branch, National Civic Federation.
 The State Federation of Women's Clubs, Home Economics Section.
 The United States Department of Agriculture, Division of Publications, Washington.
 The U. S. Bureau of Education.
 The Children's Bureau, Department of Labor, Washington.

Books

"Feeding the Family"—Mary S. Rose—Macmillan Company, New York.
 "Care and Feeding of Children"—Dr. L. E. Holt—D. Appleton & Company, New York.
 "Training the Boy"—Wm. A. McKeever—Macmillan Company, New York.
 "Training the Girl"—Wm. A. McKeever—Macmillan Company, New York.
 "Cost of Living Series"—Ellen H. Richards—J. Wiley & Sons, New York.
 "The Care of the House"—T. M. Clark—Macmillan Company, New York.
 "How to Live"—Fisher & Fisk—Funk & Wagnalls Company, New York.
 "One Woman's Work for Farm Women"—Jennie Buell—Whitcomb & Barrows, Boston.
 "Home Hygiene and the Prevention of Disease"—Dutton (Duffield & Co.).

2. EDUCATION

Agencies

The State Board of Education, State Capital.
 The Farm Bureau of your county.
 The State Agricultural College, Extension Service. The State University.
 The State Grange.
 The Free Public Library Commission, if any.
 Parent-Teacher Association.
 The State Federation for Rural Progress, if any.
 The United States Bureau of Education, Washington, D. C.

Books

“Among Country Schools”—O. J. Kern—Ginn & Co., New York.
 “The Redirection of the Rural School”—L. H. Bailey—Macmillan Company, New York.
 “Country Life and the Country School”—Mabel Carney—Row, Peterson & Company, Chicago.
 “Practical School and Home Gardens”—G. W. Wood—Long & Company, Lincoln, Nebraska.
 “Educational Resources of Village and Rural Communities”—W. R. Hart—Macmillan Company, New York.
 “The Village Library”—Mary A. Tarbell—Massachusetts Civic League, Boston.

3. PUBLIC HEALTH*Agencies*

The State Department of Health, State Capital.
 The Health Officer in your district.
 The State Agricultural College, Extension Service. The State University.
 The State Anti-Tuberculosis League, if any.

Books

“The Sanitation of a Country House”—H. B. Bashore—J. Wiley & Sons, New York.
 “Principles of Sanitary Science and the Public Health”—W. Y. Sedgwick—Macmillan Company, New York.
 “A Manual for Health Officers”—J. S. MacNutt—J. Wiley & Sons, New York.
 “A Manual of Personal Hygiene”—W. L. Pyle—W. B. Saunders Co., Philadelphia.
 “General Bacteriology”—Edwin O. Gordan—W. B. Saunders Co., Philadelphia.

4. TRANSPORTATION AND COMMUNICATION*Agencies*

The State Highway Commission.
 The State Agricultural College, Extension Service. The State University.
 The United States Department of Agriculture, Division of Publications, Washington.

Books

“Roads, Paths, and Bridges”—L. W. Page—Sturgis & Walton Co., New York.
 “Construction and Care of Earth Roads”—Ira O. Baker—University of Illinois, Urbana.
 “Railroad and Street Transportation”—R. D. Fleming—Cleveland Foundation, Cleveland, Ohio.

5. RECREATION
Agencies

The Farm Bureau of your county.
 The County Young Men's Christian Association secretary of your county.
 The State Agricultural College, Extension Service.
 The State Civic League, if any.
 The Playground Association of America, 1 Madison Avenue, New York.
 The Department of Recreation, Russell Sage Foundation, 103 East 22d Street, New York.

Books

"The Unused Recreation Resources of the Average Community"—C. A. Perry—Russell Sage Foundation, New York.
 "Play and Recreation for the Open Country"—H. S. Curtis—Ginn & Co., New York.
 "Neighborhood Entertainments"—R. B. Stern—Sturgis & Walton Co., New York.
 "The Home Playground"—Joseph Lee—Playground Association of America, 1 Madison Avenue, New York.

6. CIVIC AFFAIRS
Agencies

The State Civic League or other similar organization.
 The State Agricultural College, Extension Service.

Books

"Rural Improvement"—F. A. Waugh—Orange Judd Company, New York.
 "Town Planning for Small Communities"—C. S. Bird, Jr., Appleton & Co., New York.
 "Community Civics"—Field and Nearing—Macmillan Company, New York.
 "The Farmstead"—I. P. Roberts—Macmillan Company, New York.

7. PUBLIC MORALITY
Agencies

The State secretaries or resident bishops of the various denominations.
 The State Federation of Churches.
 The State Young Men's Christian Association.
 The National Committee of the Young Women's Christian Association, 600 Lexington Avenue, New York.
 The State Society for the Prevention of Cruelty to Children.

Books

"The Priest and Social Action"—Charles Plater—Longmans, Green & Co., New York.
 "Problems of the Town Church"—G. A. Miller—Fleming H. Revell Company, Chicago.

"Institutional Work for the Country Church"—C. E. Hayward—Burlington Free Press Association, Burlington, Vermont.

"The Country Church"—Gill & Pinchot—Macmillan Company, New York.

"The Church of the Open Country"—Warren H. Wilson—Missionary Education Movement, New York.

"Using the Resources of the Country Church"—E. R. Groves—Association Press, New York.

"The Country Church and the Rural Problem"—K. L. Butterfield—University of Chicago Press, Chicago.

"Vital Problems in Rural Leadership"—W. J. Campbell—International Y. M. C. A. College, Springfield, Mass.

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